

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1419.—VOL. XXXII.

London, Saturday, November 1, 1862.

STAMPED.....SIXPENCE.
UNSTAMPED..FIVEPENCE.

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FOR SPECIAL SALE, net:—40 Coal Mawr Pool, £3 1/2; 100 Hawkmoor, 6s. 3d.;

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* Prospectus of North Wheal Ludcott are now ready for distribution.

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50 Great Greenville, £2 1/2; 20 Fife Hill Wood, 10s.; 4 Garthland, 50 Great Retailack,
6s.; 50 Great Wheal Martha, 6s.; 50 Hawkmoor, 7s. 6d.; 50 Hinderton Down, 5s.;
50 Ludcott, £1 1/2; 10 Lady Bertha, 31s. 6d.; 10 Marke Valley, £1 1/2; 20 North Jane,
12s.; 20 North Miners, 10s.; 10 North Croft, £6 1/2; 20 North Treaske, £1; 20
North Robert, 20s.; 10 North Phoenix, £6 1/2; 75 North Great Work; 20 Prosper United,
50 Polden-and-dreys, 15s.; 15 Prospect (Breamge); 5 Wheal Polmear, £1 1/2; 10 Wheal
Hawthorn, 25s.; 25 Wheal Sicily, 10s.; 25 Wheal Harriet, 37s. 6d.; 10 Wheal Greenville,
25s.; 25 Wheal Wheal Jane, 21s.; 30 Wheal Polmear, 6s. 6d.; 5 Wrendon Consols, £1 1/2;
Hawthorn United, £2 1/2; 5 St. Ives Wheal Allen, £2; 20 St. Just United, £2 1/2;
Trelawny, 21 1/2; 5 Treworlos, £5; 5 Wheal 40, 10 Torridge, 9s.

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shares and stocks punctually attended to on commission, or at nett prices for cash, or
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connection in different parts of Cornwall and Devon, enables him to supply at all times
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sale of shares, especially so as he receives the earliest information of any rich lode or
dealing being made; or, on the other hand, a falling off in the value of lodes, &c.

MR. P. WATSON, and Clients will refer to my recommendations during the last
six or eight months in my "Weekly Circulars" (as well as by letter) of some Sixteen
or Eighteen Mines, they will find the price has advanced considerably, as predicted—
100 per cent. whilst others, which I stated should be sold, have fallen in price.

SHARES WANTED, FOR CASH PAYMENT:—

12s. Caradon, £2 1/2.
5 Lady Bertha, 34s. 6d.
5 Wheal Union, 26.
50 Ludcott, £1 1/2.
12s. Down, £3 1/2.
5 Wheal Trevelyan, 7s.
5 Wheal Greenville, £2 1/2.
5 Wheal Tremayne (state lowest price).
50 North Down, £3 1/2.
50 Caradon, £1 1/2.
50 Union, 26.
50 Ludcott, £1 1/2.
5 Wheal Ruth, £3 1/2.
12s. Those of Peter Watson's friends who took his advice, and bought North Ros-
kar, 50 to £30 and above, can now get a good profit.

Peter Watson, Sharedealer, 79, Old Broad-street, London.

MR. LELEAN, 11, ROYAL EXCHANGE, LONDON, E.C., has
FOR SALE the FOLLOWING MINING SHARES, free of commission:—

5000 Aberdare Col-
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50 Lady Bertha, 34s. 6d.
50 Wheal Grylls, £2 1/2.
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Peter Watson, Share

Original Correspondence.

OUR COAL FIELDS.

THE "STALL AND PILLAR" V. THE "LONG WALL" SYSTEM OF WORKING COLLIERIES.

BY GEORGE SHEPHERD, C. AND M.E.

SIR.—I have read somewhere of a poor man desirous only of being fed from the crumbs which fall from his rich neighbour's table. The coal and almost fuelless nations in Europe, if it were possible, would only be too glad of the crumbs, or waste, which our coal fields are annually subject to, which, if properly collected, would amount to several million pounds per annum, and many thinking men are now of opinion that very shortly this will be a proper subject for legislative interference. The waste that the Welsh seams are subject to is now admitted on all sides; and among all the able persons in that district not one of them have ventured to refute the statement contained in my first paper "On the Stall and Pillar System of Working a Colliery." True, "A Welsh Colliery Engineer" let off a great deal of "virtuous indignation," but failed to produce a single argument to shake the evidence adduced by me. A second person has produced some mysterious figures, with the view of explaining away the cost of working these seams, but his statements will assure no one but himself, while even this person is compelled to admit the Welsh coal will not bear carriage, although he fails to see it is attributable to the method the coal is won from the seams; or, in other words, when the coal is not cut to dirt by the "cutter," it is shot to death by gunpowder, and hence its fragile nature; while in the letters of my opponents there is a marked silence as to the quantity cut to dirt, the amount entirely lost, and the proportions of best and second coal returned from the 6-ft. seam. But no one travelling through the Welsh coal fields can shut his eyes to the waste these seams are subject to from the mountains of coal dust on the surface.

In consequence of my papers on the long wall system of working a colliery, I have been courteously requested by many of your readers, and also by some of your correspondents, to give some further practical details on the long wall system, and to furnish some general information on points they have advanced, which I will now give as briefly as circumstances will admit; but I certainly should advise those gentlemen who feel an interest in this subject to visit some of the coal fields in either Staffordshire, Shropshire, or Warwickshire; they would meet with a courteous reception, and I feel confident every information would be most readily afforded for an inspection of the colliery operations in those districts. A man may read works on chemistry all his life, but yet know little, or next to nothing, of experimental chemistry, while a single chemical experiment would afford a vast amount of practical information; and so it is with colliery operations. Anything I could write would fail to give the practical experience which would be obtained from a visit to the scene where the operations are carried on in the practical form. Again, I would respectfully request that whatever discussion in the Journal may ensue from my observations, it will be conducted in that dignified and friendly spirit the subject requires. If I have in these papers given a pen-and-ink sketch of things as they came before my eyes, it was not with the view of giving offence to any party, but simply and solely for the purpose of pointing out what I considered errors in the systems of working the seams, and also with the view of introducing a better method, both for the benefit of the colliery owners and for the comfort of the collier in his daily avocations. I am well aware of the deep-rooted prejudice which exists in every colliery district against innovations; but I am one of that class who always give prejudice a wide berth; and wherever I see improvements or systems in any branch of commercial life carried on with success, I can always find time to investigate and learn, and, when an opportunity occurs, to turn it to practical account. I detest prejudice of every kind, it has ruined and destroyed thousands, it stands continually in the way of man's happiness, it prevents progress in both men and nations. I look on prejudice, and its sister excitement, as the two greatest evils which can beset either frail humanity or nations generally; the former prevents progress, the latter produces folly, and more often ruin and misery. My motto is examine, mark, and learn, then reason will do all the rest for us; and I am pleased to find this spirit so thoroughly exhibited in most of the letters that have been addressed to me on the subject I have taken up.

I will now, to the best of my ability, endeavour to reply, as generally as possible, to the questions advanced by the various writers, which appear to be as follows:—

1. The depth of the seams of coal from the surface.
2. The distance the coal is conveyed underground.
3. The rise or angle of the seams.
4. The thickness of the seams.
5. Whether the coal is hard or soft.
6. The nature of the cleavage; if the partings or faces, as they are termed, are regular.
7. The nature of the roof, and if subject to partings or slips, or anything like a regular system of cleavage, similar to that which overlies the coal.
8. The cost of making and maintaining the gate-roads through the goaf or "gob."

I have taken these questions from the letter of your correspondent, "V.," as they are precisely the same as those asked by other writers.

In reply, I would state in the districts alluded to the depth to the seams is various—in the shallow mines from 50 to 70 yards, in the deep from 200 to 350 yards. With reference to the cost of winding the coal, the general wages of the engineer is about from 14s. to 16s. per week; he has no stoker, and the quantity of coal raised per day is like that of other districts—according to the demand; therefore, the cost of the winding does not amount to, perhaps, more than 4d. per ton, so much.

2. The distance the coal is conveyed underground in the deep mines, at times, is very considerable, varying from one to two miles, according to circumstances. In the shallow mines it is cheaper to sink additional shafts at intervals than incur the expense of long gate-roads, as invariably the roofs in the shallow are more tender than in those of the deeper workings.

3. With reference to the angle at which the seams lie on the earth, these are also variable. In some mines the seams are horizontal, in others at angles varying from 10° to 30°. A short time ago I was called in to report on the Shatterford Colliery, near Kidderminster, where they were working a seam of coal on the long wall, at an angle of 45°, and carry the gate-roads after them through the goaf or gob. The Warwickshire seams generally lie at an angle, if I mistake not, of about 35° with the horizon. In this case the seams are worked with very great economy, as in a great measure the horse labour is dispensed with. A small steam-engine draws all the coal to the bottom of the shaft, after which it is raised by the engine on the surface, and in some instances the surface engine also draws the coal out of the works.

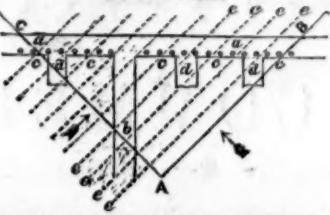
4. The seams of coal also vary in thickness from 20 in. to 6 and 7 feet. 5. The general character of the coal is like that in other districts—some seams hard, others soft.

6. In the cleavage the seams generally contain the average amount of slips or faces, as they are termed, and these slips also extend regularly into the roofs, which overlie the coal; while, as to the roofs over the coal, these are also variable, sometimes rock, coal, shale, fire-clay, blue-bind, as it is termed, and so on; in fact, there is every variety of roof to be found in these districts. But as sections of these coal fields have been published on various occasions, those who are desirous of making themselves acquainted with the general characteristics of these districts cannot do better than consult the maps and sections, where they will find every particular as to the geological formation.

I have already stated each pit is generally let to two men, who are termed "bartermasters" or "batties;" they are generally selected from the best educated of the colliers, and with some little capital, they consequently find all their own tools, of every description, including horses for the works; and from their long experience they invariably open out their work in a form best adapted for getting the coal, and also for carrying their gate-roads through the goaf, or gob, after the face. In doing this they are always guided in their operations by the angular form of the cleavage of the slips. Now, to open the wall of the coal in such a manner as to "breast" or parallel with the angles of the slips, the best roof would be so troublesome that no amount of timber would keep it up, while to let the coal would require the constant aid of gunpowder, and, consequently, it would be shot to dust in the operation; in fact, it would be a ruinous concern. Again, to open the wall at right angles with the slips or cleavage would bring two or three of the slips in a continuous or parallel line with the gate-roads; this would render the gate-roads dangerous in the extreme, if not impracticable; the roads would be continually falling in, therefore practical colliers carefully avoid these extremes—if I may so term them. But they generally throw the face of the work or wall at an angle of about 45° with the slips or cleavage, as will be seen by the following sketch. The slips also cross the gate-roads at the same angle as in the wall, in such a manner that each space

between the slips is supported by the face of the coal and the gob, and by the line of timber in front of the gob; the latter is regularly built up with the dirt obtained out of the "wastes" or spaces left open, the roof in these wastes fall in at leisure for that purpose, as the face of the work advances.

GROUND PLAN.



Or to illustrate this more practically from the sketch, let *a a*, represent the face of the work; *b*, the gate-road, *c c*, the cogs, or parts built up with the dirt obtained out of the falls of earth on the "wastes"; *d, d, d, o, o, o*, representing the line of the timber which is moved forward, with the face of the coal (no timber is left behind), as the coal is extracted; *e, e, e*, would represent the position of the cleavage, which is at an angle of 45° with the face of the coal. Now, instead of this, if the coal be worked in a position from *A* to *B*, each slip would be parallel with the face, and the roof would fall with the coal, and, therefore, be a troublesome affair. Again, if the seam were worked on the line of *B* and *C*, each slip would run parallel with the gate-road, which would throw the road in; but by throwing the work in the position shown in the sketch, a good roof is obtained in the wall, and the gate-roads are also protected. I have no doubt but that on all occasions where the long-wall system has failed in any colliery, it has been for the want of this very precaution, or practical experience on the part of those who have been entrusted with the colliery operations.

I may add that the roof in some parts of the gate-roads is of a tender nature, the same as the roads used in the stall and pillar system, but these contingencies are always provided for, and cause little or no anxiety; while in other parts, where the roof is of an average nature, it gradually settles down, or, as it is termed, takes its weight, after which it gives little or no trouble for years together, without the aid of timber of any kind; in fact, it is left to take its course. More generally the roof does not fall, but the bottom of the road swells up; but all this is kept in order at a very trifling expense. I should say with an average roof the cost of making and maintaining the gate-road does not exceed 1d. per ton on the amount of coal raised; and, from the cheap rate the seam is worked on the long wall system, the cost of making and maintaining the gate-road is scarcely worth a consideration. In addition to this, the gate-roads are also the air courses for ventilating the works, so that the cost of air-courses and brattices is entirely dispensed with, which reduces the cost of the gate-roads to a nominal sum; while on the wall with the angle of the slips or faces thrown in the position shown in the sketch, after the holes have undercut the coal, when the timber props are removed the coal falls in masses of several tons weight, which requires to be broken up before it can be loaded into the wagons to be raised to the surface. The colliery owner, on his part, has little or no trouble with the works; he simply pays for the amount of coal passed over the machine, claims the slack as his own property, employs an underground agent for the whole colliery to see that the seams are properly worked, and to render the chartermasters all the aid they may require when difficulties arise in their works.

In the long wall system, where several seams of coal lie above each other two seams cannot be worked in the same direction at the same time, as the lower workings would put the strata above in such a state of commotion that it would render it impossible to keep the gate-road open; this is always avoided. If it is desirable to work two seams in the same pit each seam is opened out in an opposite direction to the other, until the boundary of the seams are reached, and *vice versa*. When a seam is first opened out for some little distance on the long wall system, and the first "taking weight" (as it is termed), or the first settling down of the superincumbent mass of earth over the space from which the coal has been extracted, is rather a formidable affair; it is, in fact, an earthquake—indeed the roar of the earth is terrible for the first few minutes; the whole mass is in a violent state of agitation, until it has fully taken its bearing in the goaf, or gob; the timber creaks with the noise of artillery, and at times even experienced colliers are inclined to fly from their work; but it is of brief duration, and after the first settling, for almost the whole of the after workings, this process is gradual and almost imperceptible, neither does this settling down of the strata injure the seams which may lie above the one being worked.

I have now given a general outline of the chief characteristics of working a seam of coal on the long wall system. In my previous papers I gave the price per ton of getting the coal, also the proportion of best coal, seconds, and slack, and also the amount of loss—in fact, there need be no loss whatever, every bit of the slack may be also raised, as no portion of the coal is left in the form of a pillar to support the roof, or for any other purpose. In conclusion, I would urge on those who are desirous of getting more practical experience on this subject to visit the collieries where this system is in operation; and, as I before stated, their time and expense would not be altogether lost. I cannot reasonably ask for any more of your space this week, but I will reply to the observations of your correspondents in next week's Journal.—26, Throgmorton-street, E.C.

TORBANE MINERAL.

SIR.—I have perused the letters, in last week's Journal, from Mr. Gillespie and Dr. Campbell with much interest, the specimen shown in Mr. Young's case being to me quite new as a sample representing the Torbane mineral, but although labelled "Boghead coal," the exhibitor may not intend it to represent the "Torbane mineral," because, by directing your attention to the sample of oil as made from the various coals, I observe that the oils are labelled simply as "burning oils;" and although, perhaps, not known to the general public, nevertheless it is a fact that the Commissioners at a late hour prohibited paraffin oils from being shown within the building, and prevented some from exhibiting who had gone to a considerable expense in preparing cases, &c. Mr. Young, being a Juror, must have been well aware of this, and besides, the Commissioners being "all honourable men," would certainly give Mr. Young a notice similar to the others. Now, as Mr. Young and partners manufacture their paraffin oil from the "Torbanehill mineral," and Mr. Young alleges he has a patent to prevent others from doing so without his consent, and also that burning oil made from this mineral is "paraffin oil," is it not possible that in consequence of the Commissioners' prohibition as aforesaid, he was compelled to exhibit "coals" capable of producing a burning, not a paraffin, oil? Under these circumstances, the specimen labelled "Boghead coal" may not be intended to represent the well-known paraffin oil producing substance at all. Whichever way it is, an explanation, in justice, is due to the public, and I thank Messrs. Gillespie and Campbell for the opening of the question. Mr. Campbell does not seem to be aware that we have a small quantity of oil-producing coal in England, although very much inferior to the Boghead mineral, yet thought worthy of having works erected to manufacture oil from it.

Old Jewry Chambers.

MINING IN THE WEST OF IRELAND.

SIR.—Having been lately in the West of Cork, I would offer a few remarks on the mines I passed through. The first of these was the GURVILLIG MINE, which is situated on the south side of Bantry Bay; it is worked by a Dublin company, under the management of Capt. J. Penrose, late of the Broadhead Mine; the workings are confined to the sea level, exceeding about 50 ft. per month. On the road from thence to Crookhaven I passed through the DREANALAMON and LETTER MINES; but very little is doing at either of these mines, the latter employing only five or six men.

At the CROOKHAVEN MINE the workings are limited to the sinking of a perpendicular shaft and driving a cross-cut, the shaft being about 70 fms. from surface; there is a good pumping-engine (which has been improved of late), crusher, store-houses, &c., on the mine, but not a particle of copper is visible anywhere at surface; the manager is Capt. Henry Thomas, who has been a great many years in the country.

About five miles from Crookhaven is the DUNUNS MINE, where good stones of copper may be seen. It is being worked by a single proprietor, Mr. Battler, of Dublin, the manager being Capt. Tonkin, who appears to be an old and experienced miner.

About twelve miles east from Crookhaven is the SCHULL BAY or COSHERN MINE, from which immense quantities of copper ore have been sold; but at present very few hands are employed, although there is ample machinery on the mine. The worthy manager, Capt. Wm. Thomas, is well known for the philanthropic course he took in the famine of 1850.

Three miles to the east of Schull Bay is the BALLYCUMMIK MINE. This mine sold from June, 1861, to June, 1862, above 3000 ft. worth of copper ore, and is at present making good bi-monthly sales of ore, and is improving in depth; there is a steam pumping-engine and drawing-engine with crusher attached. About 120 persons are employed on this mine, the agents being Capt. Pope and Allen.

Adjoining Ballycummiik is the GREAT CAPPAGH MINE, which commenced operations

in May last, and it is surprising with what energy and spirit these works have been carried on, reflecting great credit on the management of Capt. Eddy and Son. Every thing appears to be laid out in a thorough miner-like way. There is a splendid 30-in. cylinder pumping-engine at work, which has forced the water to the 54 fm. level, 34-in. drawing-engine, with crusher attached, nearly completed, a double slip-road made complete to the 54 fm. level, a large quay built, three-quarters of a mile of railway laid down, store houses, carpenter's shop, &c., built, dressing-floors laid out, and I would omit to mention that piles of copper ore are already to be seen on the floors, the being of a rich quality, and, by the information I gathered from Capt. Eddy (whose well known when manager of Pendean Consols, St. Just), it appears that after the drawing-engine is set to work, and the water forced, that great quantities of copper ore will be raised from this mine.

About three miles to the east of Great Cappagh is the ROARING WATER MINE, which has lately been inspected by Capt. Carteau and Angwin (of the St. Just United Mine). Good stones of ore are to be seen here, and I was informed by a Cornish miner, who appeared to be in charge of the mine, that a company are about to re-work this exceedingly promising mine. This being the last in my route, after a long but pleasant drive in low-back car, I arrived at Bandon, highly well pleased with my flying visit in the West of Ireland.—Truro, Oct. 22.

NEW MINES OR RE-WORKINGS FOR INVESTMENT.

SIR.—If the following facts were inserted in the Journal, they might lead to a discussion between some of your able correspondents that would be of value to the mining public, as to which is the most likely to be profit to speculators,—new mining ground, of which there is plenty to be found, or old poor mines, after being once abandoned, again re-worked. The work of the six following old mines, at a loss to the present time of less than 400,000*l.* the market value now but very little. The outlay of the first six dividend mines in the Share List, and six others promiscuously selected, being 93,234*l.* the present value of each mine, to bring them to a dividend state; while the dividends and present market value of the twelve mines amount to no less than 2,062,234*l.* Supposing 600*l.* to be sufficient to prove a new mine, then the sum expended on the old mines would have been sufficient to prove fifty new mines; and then suppose only one in five became successful, that would leave ten profitable mines. Again, taking an average that was a capital of 1,718,520*l.* instead of almost nil in working the old mine.

Tuckingmill, Oct. 27.

WILLIAM KNUCKEY.

Money spent in working old mines:—

Great Wheal Vor	£250,000
Halamanning (say)	50,000
East Wheal Rose (say)	30,000
Great Tywarnhale	21,000
Great Wheal Busy	84,000
Pend-an-drea	30,000—£165,000

Money spent in opening up dividend mines, the first six in the Share List of the Mining Journal, with six others promiscuously taken from the List:—

	Paid.	Present value.	Returned in dividends.
Bedford United	£9,330	£18,000	£31,500
Boscombe	4,900	14,400	8,760
Botallack	18,200	50,000	89,550
Caro Bras	15,000	65,000	273,000
Croco Hill	12,288	20,480	2,432
Craddock Moor	8,967—£68,685	27,957—£195,837	8,075—£123,500

Add present value 574

Makes a total value of £1,062

THE WENDRON MINES.

SIR.—Following on my previous remarks on the mines of this district and their present aspect, it may be interesting to go back a long way in their history, and the more the subject of ancient tin mining is considered the more interesting it becomes. The appearance of the tin-bearing part of our parish must at one time have been very peculiar, for in ancient days it was a district without cultivation; and as nearly every lode contained tin, and was wrought upon by shallow workings for very great lengths on its course, a hasty view of the country would have given a barren prospect, striped by ranges of rock-banks, with no relief from the sameness of the picture, except here and there a

small

as the lode could be reached from the lower levels in a very short time. It found equally productive as the upper levels, large profits must be the result.

The report and accounts were unanimously received and adopted, and a resolution was passed to the effect that the shares of those parties now in arrear of call be declared absolutely forfeited, unless paid up within fourteen days.

A call of 2s. per share was made, and if paid within fourteen days a discount of 5 per cent. to be allowed.

The committee of management were re-elected, with thanks for past services.

A vote of thanks to the Chairman terminated the proceedings.

PENDEEN CONSOLIDATED MINING COMPANY.

A general meeting of proprietors was held at the London Tavern, Bishopsgate, on Tuesday.

Mr. W. BAWDEN in the chair.

The notice convening the meeting having been read, the minutes of the last were read and confirmed.

The accounts for the two months (Aug. and Sept.) showed a profit of 1281. 7s. 10d. The assets exceeded the liabilities by 10132. 7s. 11d.

The report of the agent stated that the north part of the mine, in copper, had declined; but the improvements in the south part for tin were such that the prospects of the mine never were better than at present. Besides the chance for discovery of copper north, he believed they had a good and lasting tin mine south of engine-shaft.

A letter from the purser was read, which stated that the stamps now had a full stream of water, on account of the late rains, and that they would be able to make double returns for the next two months. The copper had fallen off, but their prospects for tin were very good indeed. The 118 had improved during the last week, and would, no doubt, resume its former value.

The CHAIRMAN said it could not fail to be satisfactory to the shareholders to find that, although the copper had somewhat fallen off, the prospects for tin had improved. Even during the last week the 118 had improved 10f. per fm., and the 106 from 15f. to 22f. They had a third level coming on very fast towards the tin ground, which they hoped would produce the same successful results. The levels above the 118 and 106 had not yet been sufficiently extended to know whether the tin held up, but they expected it would hold up to surface. He estimated that there were discovered—that is, that they had ore in reserve—77 tons of fine tin, which, according to the last sale, was worth 68s. per ton. He calculated the expenses of taking that tin away, dressing it, and bringing it to market, would be about one-third of the amount which it would realize. He did not think they would be able to take it away yet, because they would have to erect more stamps to prepare it for market before it could be turned to the most beneficial account. As regarded the intersection of the lode north, he had been informed that close up to the junction it might, perhaps, be cut poor, but it would improve on driving. It was considered that they were discovering something that was not superficial, but something likely to last as long as anything in mining would last. If they took their neighbouring mines as an analogy, they would find that the deeper they went the richer they became. Under any circumstances, they (Pendean) were in a very true and good position—they were making good profits without touching their backs, so far as the tin was concerned. He might state that they proposed renting two mills, which were in the present neighbourhood of the mine, by which they would be able to work nine more heads of stamps.

Mr. JAMES asked if the committee had any idea of the cost of these mills?

The SECRETARY said that the estimate was that the dressing-rooms and stamps would cost about 3000. The mills would be rented.

The report was received and adopted, and the accounts passed and allowed.

The committee of management were re-elected.

A vote of thanks to the Chairman terminated the proceedings.

EAST CARN BREA MINING COMPANY.

A general meeting of proprietors was held at the company's offices, Threadneedle-street, on Wednesday.

Mr. C. J. FURLONGER in the chair.

Mr. BUCKLEY (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

A statement of accounts was submitted, from which the following is condensed:—

July mine cost, merchants' bills	£1112 18 11
Aug. ditto	1599 19 1
Dues	413 11 5
Advance on tribute	80 0 0
Sundries	15 9 1 = £3221 18 6
Balance last audit	£477 4 2
Advance on tribute	40 0 0
Copper ore sold	2670 4 7 = 3187 8 9
Balance (debit)	£ 34 9 9

The assets (including an ore bill due on Nov. 11) amounted to 3147.

The report of the agent was read, as follows:—

Oct. 27.—Since our last meeting we have driven the 60 cross-cut 8 fms. south, and intersected the middle lode; so far as opened on, 9 ft., it is 3 ft. wide, composed of spar, and copper ore, worth for the latter 2 tons per fm. There is a large stream of water issuing from the lode, which has drained the upper levels west of the cross-course, and have also drained the 50, on the south lode; we shall now be enabled to sink the western shaft below the 50, on the course of the south lode, which is a very important point. Since the last meeting we have intersected a lode in the 50 cross-cut north, underlying south about 1 foot in a fathom (towards the engine lode), and have opened on its course 8 fms., which will produce about 1 ton of ore per fm. There is a winze sinking below this level, down 2 fms., in which the lode will produce 2 tons of ore per fm. There are about 12 fms. to drive the 60 cross-cut to intersect the lode in that level.—Middle Lode: The 50 fm. level is extended 15 fms. east of the cross-course; the first 10 fms. the lode has produced 3 tons of ore per fm., the remainder yielding stones of ore. In the back of this level there is a pitch working at 6s. tribute.—South Lode: In the 50 fm. level the lode is still dislodged by the cross-course. The new shaft is holed to the 40; the men are engaged cutting it down to its proper size. The 40 fm. level is extended 9 ft. east of the new shaft; the north part of the lode, on which we have been driving, will produce about 2 tons of ore per fm.; the south part is standing, and so far as seen, against the end of the shaft is from 3 to 4 ft. wide, a good coarse ore. In consequence of the severity of the weather, our surface operations have been very much retarded. The engine house is completed, and we have this morning commenced to heave in the engine. We shall sample on Wednesday about 450 tons copper ore.—T. GLANVILLE, J. SCHOLAR.

The CHAIRMAN having moved the adoption of the report and accounts, stated that it had been seen that the costs had been heavier than usual, which was accounted for by the fact that they included the cost of building the engine-house, as alluded to in the caption's note.

A SHAREHOLDER enquired if the new engine was paid for?

The CHAIRMAN said that the engine was not yet placed upon the mine. The agents stated in their report that "In consequence of the severity of the weather our surface operations have been very much retarded. The engine-house is completed, and we have this morning commenced to heave in the engine."

Mr. G. BATTERS enquired when it was expected the engine would be erected?

Mr. GUNDREY (who had recently visited the mine) stated that the engine would be erected by the end of the year.

The CHAIRMAN (in answer to a question) stated that the cost of the engine was 16000., which was about the amount estimated.

Mr. GUNDREY enquired what were the prospects for the coming two months?

The CHAIRMAN said the costs were estimated at 13000. per month for the next two months; they might not be so much as that, but it was always better to be on the right side.

Mr. GUNDREY reminded the meeting that the sinking of the new shaft had very considerably added to the costs. That shaft, which had been sunk from the surface to the 40 in a very short time, had required an unusually large quantity of timber. He mentioned this fact to show one reason why the merchants' bills had been so heavy.

The CHAIRMAN said the benefit of that shaft would be felt during the coming winter.

Mr. BATTERS supposed they would soon be able to draw through that shaft.

Mr. GUNDREY said that they would be able to do so, and that as soon as the shaft had passed the 50 they would begin to rise and sink.

Mr. WHISTERIDGE enquired if, after the engine was set to work, there would be any further extra expenses?—The CHAIRMAN did not see that there could be any further extra expenditure. Indeed, when the lode was intersected, he hoped they would be in a position to declare a dividend rather than anything else. He begged to remind his fellow-shareholders that, notwithstanding the heavy outlay, they had in no way been trenching upon the reserves. (Hear, hear.)

Mr. WHISTERIDGE enquired the estimated value of the reserves?

The CHAIRMAN said that was a somewhat difficult question to answer. Some competent authorities had valued the reserves at such a large amount that he did not like to repeat it, but he thought it would not be too much to say that they were at least 40,000. If in making that statement he erred, it was certainly upon the right side.

Mr. GUNDREY thought the attention of shareholders should be specially called to the fact which had been already alluded to by Mr. Batters—the great improvement that had taken place in the character of the lode in depth. Not only had the lode increased in width as the depth was extended, but it had materially improved in value, which practically negatived the theory which had been so freely, but untruthfully, propounded. In the 50 the lode was but 6 in. wide, but in the 60 it had increased to 3 ft., and the character of the ground was very congenial for the production of a large deposit of ore.

Mr. BATTERS believed that the 50, on the south lode, was still in the cross-course, and enquired when it was expected they would be through the cross-course?

The CHAIRMAN replied that he believed in a few days.

Mr. BATTERS: The lode is improving, east of the cross-course; how many fathoms of whole ground are there unexplored in that direction?—Mr. GUNDREY: About 170 fathoms.

Mr. BATTERS: How far have you driven in the 26?—Mr. GUNDREY: About 18 fms. east of the cross-course—in the level altogether about 200 fathoms. The new engine will be of great assistance, for as we get deeper, the lode being so porous, the water came from the mine eastward of us—the Sparnon part of Peden-an-dre.

The CHAIRMAN: But are they not putting in an engine at Sparnon?—Mr. GUNDREY: They have just begun to clean the new shaft for that purpose. That will be of great assistance to East Carn Brea, as it will take away all the top water.

The CHAIRMAN: I believe they would have forfeited their lease if an engine had not been erected?—A SHAREHOLDER: I believe so.

The report and accounts were then unanimously received and adopted.

The CHAIRMAN said that they estimated the two months' costs at 27500., and the dues

at 3000. There was an ore bill due on Nov. 11 for 3212; therefore, at the end of the two months, suppose the costs to amount to the estimate, there would be a balance to the credit of the account of 2750., in addition to which there would be at least 3000. worth of ore sold. For his own part, he believed they would have a dividend very much sooner than many shareholders wished.

Mr. WHISTERIDGE: You do not mean shareholders, Mr. Chairman?

The CHAIRMAN: Yes, I do. I mean what I say—I believe we shall have a dividend long before many shareholders wish; that is to say, nominal shareholders.

A vote of thanks having been passed to the Chairman, the proceedings terminated.

GREAT WHEAL FORTUNE.

A meeting of adventurers was held at the account-house on the mine, on Wednesday,

Mr. T. W. ROBINSON (purser) in the chair.

The PURSER having read the notice convening the meeting, the following accounts were presented:—

Balance from last account	£ 970 11 1
Sales of black tin (less dues, 44s. 7s. 1d.)	8178 7 2
Extra carriage of tin	6 4 0 = £9155 2 3
May labour cost	£1457 10 9
June ditto	1355 19 0
July ditto	1379 18 6 = £4129 8 3
Bankers' charge (six months)	40 1 2
Stannaries' assessment (three months)	7 9 0
Income and land tax (three months)	14 18 5
Merchants' bills	2168 5 6
Dividend (10s. per share)	899 0 0 = 7323 2 4

Leaving credit balance £1831 19 11

It was then moved by Mr. WM. HOSKIN (of Hayle), and seconded by Mr. SAMSON WATERS (of Whitehill) that the accounts as presented be received and accepted, which was carried nem. con.

The PURSER explained that, although their book showed a balance of 27500. 19s. 1d., the committee only recommended a dividend of 10s. per share. The accounts were rather behind, labour cost being only charged up to July, and the merchants' bills to June. By keeping a good balance in hand, they would be able to bring up a month's cost at the next account.

It was then proposed by Mr. HOSKIN, and seconded by Mr. FREDERICK HILL (of Helston), that a dividend of 10s. per share be declared, payable forthwith, and that the balance be carried over to the next account.

Mr. GARLAND (of Fowey) suggested that a dividend of 15s. per share could be very well paid, as their profits for the quarter amounted to that sum.

Mr. HOSKIN differed from Mr. Garland. Their costs were behind, and before they increased their dividends these should be brought up. When that was done, with the present price of tin, they might go on very glibly, but it was equally true that the dividends would be proportionately diminished.

After having so successfully overcome great difficulties and anxieties, and having something like 70000. standing to the credit of the profit and loss, he thought it became them, as prudent men, to pause before they lessened their dividends by enlarging their capital.

If matters were left to the managers, it would be a matter of some consideration of the shareholders that had such confidence in the executive as to leave it to them to arrange, and consider about the dividend, and to otherwise do the best they could for the shareholders.

As regarded the new capital, there was something to be said on both sides of the question.

It was very true that if the Fortune Company had an extra capital of 10,000, or 20,000, things would go on very glibly, but it was equally true that the dividends would be proportionately diminished.

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It was very true that if the Fortune Company had an extra capital of 10,000, or 20,000, things would go on very glibly, but it was equally true that

engaged in stoking some ground in the 32 north. Saturday last being our pay and setting day, the following bargains were set:—The 54 north to six men, 2 fms. at 71. 10s. per fm. The 42 west to six men, 2 fms., at 47. per fm. The 32, north of south cross-cut, to four men, 2 fms., at 31. per fm. To stop the back of the 54 to four men for the month, at 50s. per fm. All the wheeling in the mine for the month at 7s. per fm.

CEFN CILCEN.—W. Davies, Oct. 30: The engine-shaft, sinking below the 96 yard level, is at present hard for progress and unproductive for lead ore. The 96, driving west, is greatly altered since last report; it is hard for progress, producing a little ore, but not enough to value. The 96, driving east, is at present unproductive for ore. The 82 is without alteration since last report.

CEFN CWM BRWYNO.—Oct. 28: The lode in the 56 yields good stones of ore at times, and still looks promising. The lode in the pitch over the 80 yields 15 cwt. of lead ore per fathom. The lode in the pitch over the 80 produces 10 cwt. The lode in the pitch over the 68 yields 9 cwt. The pitch over the 70 yields 10 cwt. The lode in the pitch over the 56 produces 10 cwt. We sampled 51 tons of good quality ore to-day. Some of the tribute pitches have fallen off, which made our sampling a little less than usual. The dressing, &c., is going on regularly.

CENTRAL MINERA.—W. Davies, Oct. 30: The water is very much abated in the eastern driving on the course of the lode. There is a joint or water-course come in from the south side with large spots of spar, but unproductive for lead. The western end is hard for progress.

CROOKHAVEN.—Capt. Thomas, Oct. 27: The flockan in the engine-shaft appears to be increasing in size, and the ground containing more spar, of a very kindly nature, but is now very much broken up with cross-heads, vugs, &c. On Friday last we cut a powerful feeder of water in the eastern end of the shaft, but as we are sinking with a lift of pumps, this will cause no delay to the men; we are getting down the shaft very satisfactorily. Last Saturday we put in a new connection to the sweep-rod of the balance-bob, the old one not being trustworthy. According to the instructions, I have stopped the 60 cross-cut south, which I very much regret, from the end being in a good mineralized channel of ground, and from present indications I think we are not far from a lode. The ground in this level is quite dissimilar from anything seen in the upper levels, and quite perpendicular, whereas the ground in the 40 is dipping north from 2 to 3 ft. in a fathom; this change accounts for sooner cutting the lode. Under all circumstances, I would strongly recommend you to drive a few fathoms further south; by so doing I am of opinion you will be remunerated for the outlay. The engine is working very well, and keeping the water at two strokes per minute.

CUDDRA.—F. Puckey, E. Dunstan, Oct. 29: Walker's shaft is now down about 9 fms., below the 75, and the ground still favourable for sinking. In the 75 east the lode is still disordered by the cross-course; the lode in the stopes in back of this level, west of the shaft, is 4 ft. wide, and will yield 3 cwt. of tin per 100 sacks. In cutting out the lode in bottom of the winze in the 75 we find it to be large, and producing good work for tin; this lode is looking very promising. The lode in the stopes in back of this level, east of same shaft, is 9 ft. wide, producing saving work for tin.

CWMBRANE.—Oct. 30: At the shaft, sinking under the 30, the lode is 4 feet wide, producing good stones of lead. In the 20 north the lode is 3 ft. wide, producing 5 cwt. of lead per fm. In the 10 north the lode will produce 5 cwt. of lead per fm.; the rise in the back of this level will yield 10 cwt. of lead per fm. Floyd's stop, in back of the 10, will produce 8 cwt. of lead per fm. The stop, south of Floyd's, will produce 8 cwt. per fm. We sold last week to Messrs. Sims, Willyams, Nevil, and Co. 20 tons of lead, at 12d. 13s. per ton, 20 cwt.

CWM ERFIN.—Oct. 29: In the stopes in the bottom of the 57 the lode is 4 feet wide, and worth about 8 cwt. of lead per fathom. In the stopes in the back of the 45 the lode is worth from 10 to 12 cwt. In the 32 the lode is small and unproductive. In the stopes in the back of the 32 the lode is slightly improved. In the 20, driving east of boundary, the lode is worth 3 1/2 ton per fathom. In the stopes in back of ditto the lode is worth from 12 to 15 cwt. of ore per fathom. In the stopes in back of the 20 the lode is worth 1 1/2 ton per fathom. In the 10, to drive east of boundary, the lode is worth 1 1/2 ton of ore per fathom. In the stopes in back of ditto the lode is worth 1 1/2 ton per fathom. An intermediate level to drive between the 10 and adit level. Driving after a little ore going west of the stopes. The adit level, to enlarge east of the drawing-shaft, has been made good for 30 fathoms, the railroad laid down, and water taken up; we are pushing on here with all speed. The averagegettings for nine weeks is 14s. 3d. per week, or 51. 4s. 5d. per man per month. We sampled yesterday 52 tons of good quality ore.

DEVON AND CORNWALL UNITED.—T. Neill, Oct. 28: At George and Charlotte the lode in the deep adit east will produce 5 tons of ore per fm. We have commenced a rise in the back of this level; the lode is 3 ft. wide, worth 6 tons of ore per fm.—William and Mary: The lode in the engine-shaft is 6 ft. wide, worth 7 tons of ore per fathom. There is no change to notice in the 22 either east or west. In the winze sinking below the 10 the lode is 6 ft. wide, worth 6 tons of ore per fm. There is no change to notice in any other part of the mine.

DEVON NEW COPPER.—P. Hawke, Oct. 29: We have commenced a cross-cut to intersect the productive part of the lode east in the 100, but there is not sufficient done yet to report in greater detail. The cross-cut in this level into the great north lode to the west of shaft towards the leader, be token a change, the water begins to issue in abundance. As regards the 88 east, the composition of the lode is splendid, as referred to in my report of the 22 inst., and the greatest energy prevails to reach the point of the horse of ground met with in driving in this direction.

DEVON UNION.—J. Donal, Oct. 30: The water is not in fork for the shaftmen to work in the bottom of the shaft at present, so that we have put the two men that were in the 28 east back into Quick's again, and put the shaftmen into this level. The lode here is about 2 feet wide, of a very promising description, composed of mudi, quartz, white iron, and good stones of yellow copper ore. We would here remark that we have driven through a very promising lode here for the last 6 fathoms, and judging from the present appearance there is every reason to anticipate a good lode at the next level (the 40), at present some fathoms behind this point. We would, however, advise to take four of the men from Quick's and put them into the 40 east to get under this run of ground and work at Quick's, when the water is in to prevent them working in the 40, and let the shaftmen work at the 28 when the water is in that they cannot work in the shaft, as these are the most promising points to be carried out; and, in fact, since the lode has made this change, it is at the present time the most promising one we have ever seen in the mine. The lode at the 24, east of Quick's shaft, is a little improved, and is now very favourable for driving. The ground is much the same as when last reported on.

DULTA.—J. Martyn, Oct. 28: We have cut a branch in the shaft about 6 in. wide, running east and west, and underlying north; it is bearing some good tin; and as to the south of this branch the ground is much better, I have every reason to believe this is nothing but a hard bar of ground, and that we shall soon be in good ground again. The severe weather has prevented the masons from working for some days, but now that it is better, they hope to be able to finish the stack in a few days, when we shall at once commence stamping and dressing.

EAST BRONFLOYD.—C. Williams, Oct. 29: The shaftmen have completed putting in penthouse, cutting pit, &c., and everything now is in good trim for working. We resumed sinking the engine-shaft on Monday, and the men are making good progress; the lode is still of the same promising appearance, and yielding a fair amount of metal. The lode in the 10, east of shaft, is improving daily, yielding at present 22 cwt. of silver-lead ore per fathom. The drawing-machine is in a very forward state, and will be completed and at work in the early part of next week. The masonry work for the crushing house has been completed with the exception of the roof, which I intend making with 3/4-in. planks. The dressing-floors are being prepared, and the machinery for dressing is in a very forward state. The pumping machinery is working very satisfactorily.

EAST BROOKWOOD.—W. V. Williams, Oct. 30: The driving of the cross-cut north towards the lode is being pushed on with all the speed possible; we have a very large stream of water issuing from the end; this rather impedes our progress, and we have led to think that in all probability it may be coming from a lode between our end and the lode we are driving to intersect. No co-steaming was ever done south of the lode the adit level has been driven on, therefore cannot say whether a lode exists between or not.

EAST CARN BREA.—T. Glanville, Oct. 29: I sampled to-day 475 tons of copper ore. There is nothing new since the report for the meeting.

EAST DELABOLE.—G. Petherick, Oct. 30: In the 50, on the sea side, we have opened a most splendid floor, which appears to be as solid as possible, of close and fine texture, and well calculated to turn out large and good roofing slate, of which a depth of 20 feet is available.

EAST GUNNIS LAKE AND SOUTH BEDFORD.—J. Phillips, Oct. 30: No alteration in the incline shaft. The lode in the 46, east of this shaft, is 5 ft. wide, producing good stones of ore. The stopes over this level is worth 13s. per fm. In the 55 west the lode is 1 ft. in. wide, worth 25s. per fm. We have suspended the slope of the 43 winze, and commenced to stop the back of the 55, west of the rise, where we can stop the ground to much better advantage; here the lode is 15 in. wide, worth 18s. per fm. There is no change in the 43 cross-cut since last reported, except that we have cut a little water, which indicates the lode near at hand. We calculate to sample on Tuesday next from 95 to 100 tons of good quality ore.

EAST TREFUSIS.—J. Hocking, Oct. 30: We have intersected Trellawny lode in the cross-cut driving north from Smith's engine-shaft; that portion of the lode cut into is small, composed of quartz and chlorite, and producing good stones of tin. The lode in the 23 end, driving west of Smith's engine-shaft, is split; the south part is 1 foot wide, composed of flockan, quartz and chlorite. In the adit level, west of middle shaft, on Trellawny lode, the lode is still small, composed of peat, and containing a little tin. The grasshoppers, in the western part of the mine, is now about the depth of the adit level; we have reached the ground, but the quantity of water lately fallen is too much, I fear, for its medium of escape; in a few days, however, by drawing it, we shall ascertain the character of the lode, and see whether we can sink to advantages.

EAST TRESKERBY.—J. Nancarrow, Oct. 25: There is a strong lode in the 40-cut, which continues to look well, and will produce 1 ton of ore per fm. As the 55 cross-cut, approaches the lode the water is on the increase, and the end is not quite so easy for driving. The 40 cross-cut north looks rather better. Considering the position of these cross-cuts, and appearances throughout the mine, it seems on the eve of important changes and improvements.

EAST WHEAL GRENVILLE.—Oct. 29: The lode in the engine-shaft, sinking below the 55, is from 3 to 5 feet wide, composed of ore, mudi, and a little tin embedded in quartz and peat—a strong and masterly lode. The lode in the 55 west is from 3 to 4 ft. wide, composed of peat and prian, with tin and mudi—kindly lode, and where we are daily expecting an improvement. The lode in the 45 east is 20 in. wide, producing a little tin, and looking very promising. The lode in the rise above the 45 east is 4 ft. wide, and worth 6s. per fathom. The ground in the 45 cross-cut south is very easy for exploring, and which we are hurrying on as fast as possible. The lode in the winze sinking below the 45 west is 3 feet wide, and worth 15s. per fathom. We have two stopes working in the back of the 45 west worth 12s. and 8s. per fathom. The slope above the 35 fm. level east is worth 6s. per fathom. We are getting on satisfactorily with the dressing.

EAST WHEAL MARTHA.—J. Richards, Oct. 30: We continue to drive by the side of the lode in the adit level, east of the engine-shaft, for more speedy progress. The lode when last cut into was of large size, presenting indications of more than ordinary character, and plainly indicating a course of ore below.

EAST WHEAL RUSSELL.—J. Goldsworthy, Oct. 29: Homersham's Shaft: Nothing has been done in the bottom of the shaft since last reported, the men having been engaged on other work, repairing shallow adit, &c.; these repairs are now nearly completed. In the 120 cross-cut, north of Homersham's shaft, there is no change, the men having done but little since last reported. In the 120 east the lode is 2 ft. wide, composed of capel, quartz, prian, mudi, and produces a little yellow copper ore; the ground is favourable for progress. In the 110 east, on the south part of the lode, the lode has been 2 ft. wide, composed of quartz, prian, and a little black oxide of copper ore. In the 110 west, on the south part of the lode, the lode has been 3 ft. wide, composed of capel, quartz, prian, peach, and mudi, and produces a little saving work for copper ore. In

the 110, east of Fewin's cross-cut, on the north part of the lode, the part of the lode that has been carried is 4 ft. wide, composed of capel and quartz, and produces saving work. In the 88 east the lode will produce 1/2 ton of copper ore per fm., with a promising appearance. In the 66 east, the lode has been cut through, which is 3 fathoms wide, composed of capel, killas, mudi, peach, quartz, and prian, and produces rich stones of yellow copper ore; the driving has been resumed east of the side of the lode. In the 45 east of the Tunnel level, the lode has been cut through, which is 2 fms. wide, composed of capel, quartz, prian, peach, and iron, and produces a little yellow copper ore—a promising lode. The driving has been resumed on the south part of the lode. In the 55 the ground in Harvey's cross-cut north, to the west of Homersham's shaft, is favourable for progress. In the 88, west of Hitchins's engine-shaft, the lode has more promising appearance; the elvan is again making its appearance on the south side.

FRANK MILLS.—J. P. Nicholls, J. Cornish, Oct. 29: The 84 north, on west branch, and the 72 north, on west lode, are without any alteration since last report. The winze in bottom of the 60 and the rise in back of the 72 are communicated, by which we find we are not rising on the same part of the lode as the winze was sunk on. The lode in the bottom of the winze is worth 1 ton of lead ore per fm., and the part carried in rising is worth 1/2 ton per fm., with a horse of ground between the two branches about 7 feet thick, which we are now cross-cutting through in the 72, and have reason to expect it equally as productive as in the winze. We have resumed driving the 60 north, on west branch, the lode is yielding about 1/4 ton of lead ore per fm. The 45 north, on west lode, has improved, and is now worth from 5 to 6 cwt. per fm., with strong indications in favour of further improvement. The lode in the 45, south of air-shaft, contains stones of lead ore, but not enough to value. We have at present three stopes working—in back of the 72, yielding about 6 cwt. of lead ore each per fm., and one in back of the 45, south of air-shaft, yielding about 10 cwt. per fm. The tribute department is much as it has been for some time past.

FURSDON.—J. Hampton, Oct. 29: The bottom level in the 21 west is worth full 2 tons of copper ore per fm.; the lode is 5 ft. big, carrying a regular north wall, with a leader of copper ore against it; there is no doubt, but this end will yet improve further, and a corresponding improvement to the level above may be fairly expected. In the 11 west, the eastern end on the new lode lately cut in the cross-cut is worth rather more than 3 tons per fm., and the western end about 3 tons per fm.; the quality of the ore from both these ends is very good, and the lode has been nowhere seen below this level, east of the 45, west of air-shaft, yielding about 10 cwt. per fm. The tribute department is much as it has been for some time past.

GREAT BRIGAN.—T. Trelease, Oct. 25: At the engine-shaft we have fixed the standing drawing-lift in the 61, and have taken up the water, &c. We shall put down another piece of main rod in the early part of next week, and make complete for clearing up the shaft below the said level. We have not yet intersected any lode in the cross-cut at the 61, east of the above shaft, but have an increase of water, which indicates something ahead. The lode in the 49, west of this shaft, is still producing a little ore, but not to value. No lode taken down in this level, east of the cross-course shaft, for the past week. The lode in the winze sinking below the 42, east of the cross-course shaft, is 2 ft. wide, producing stones of ore. The lode in the winze sinking below the 32 is still disordered, producing good stones of ore, but not to value. The lode in the winze sinking below the 28, east of the eastern engine-shaft, is 18 in. wide, containing a little ore, but not to value. The lode in the 49, west of this shaft, is 3 ft. wide, producing stones of ore, but not to value. No lode taken down in this level, east of the deep adit level, driving west of Oates's shaft, is 3 ft. wide, producing saving work for tin.

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per fathom for tin; driving by four men, at 81. 10s. per fathom. The lode in the 90, west of incline shaft, is worth 61. per fathom for tin; stopping by three men, at 21. 10s. per 100 sacks. The 80, west of incline shaft, is worth 41. per fm. for tin. We are raising a winze to communicate with the 60, by two men, at 21. 10s. per fm. The 80, east of engine-shaft, is worth 61. per fathom for tin. We are raising a winze to communicate with the 60 fm. level, by four men, at 21. 10s. per 100 sacks. Four men are sinking a winze below this level to communicate with the 60 fm. back of the 80, at 61. per fm. Four men are sinking a winze below the 60, east of engine-shaft, at 101. per fm. The lode in the 48, west of No. 3 shaft, is 1 ft. wide, of a promising character, but not to value; driving by four men, at 61. 10s. per fathom. The lode in the winze sinking below the 58 is 18 in. wide, of a kindly character, but not to value; sinking by two men, at 51. per fm. The lode in the 68, west of No. 3 shaft, is improved; it is 18 in. wide, worth 71. per fathom for copper; driving by four men, at 41. 10s. The lode in the 58, east of No. 3 shaft, is 3 ft. wide, worth 161. per fm. for copper ore; driving by four men, at 81. per fm. The lode in the new engine-shaft is worth 101. per fm. for copper ore; sinking by nine men, at 301. per fm.; sunk 26 fms. from surface. We have sold the parcel of tin at 691. per ton, but have not yet weighed it all off.

WHEAL VVYVYAN.—John Nicholls, Oct. 29: There is no alteration in the tutwork department worthy of notice since I last wrote you; I have stopped one of the pitches, and put four men to stop in the same place, in order to keep the stampa fully supplied with work. The other two pitches are without alteration in value. The dressing and other surface work are going on satisfactorily.

WORVAS DOWNS.—R. Harry, Oct. 29: We are still engaged clearing out the wide workings below the 40, and are getting timber from this place in sufficient quantities to keep the stampers fully supplied with work. During the past week we have commenced stopping in back of the 50 east; the lode is 4 feet wide, worth 61. per fm. We have also cleared up a winze in bottom of the 40 west, on the caunter: here we find the lode 15 inches wide, kindly in appearance, and producing good stones of tin in places. The former workers had a good lode in this winze, hence we anticipate an improvement here shortly. The stopes in back of the 10 are yielding fair quality timber, worth 51. per fm. Nothing else new since the last report.

YARNER.—R. Barkell, Oct. 29: The lode in the 40 west for the last 6 feet has been more split up, yielding at present saving work. The two stopes in the bottom of the 30, west of shaft, are producing 21/2 tons per fm. each; the last day or two we had a hard floor of ground in the western stope, which disordered the lode a little, but we find the lode is making good under it. The stope in the back of this level is without any alteration since last report.—**North Lode:** The lode in the 30 east is 3 ft. wide, composed of peat, mastic, and ore, worth of the latter 1. ton per fathom; the end is letting out water freely, especially in the bottom.

NEW ANGLO-FRENCH BANK.—We are informed, upon most reliable authority, that the statutes for constituting an International Bank for France and England are now under the official consideration of the French Government. In giving currency to this information, we are induced to ask our contemporary, the *Standard*, the meaning of its statement,—that "Satisfactory explanations have been furnished by the solicitors with regard to the purchase (by the Union Bank of France and England) of the business of the establishment in Paris?" To whom has that explanation been given? It is inferred that somebody has asked for it; it is unquestionable that the public is entitled to it; and whatever it may be, through publicity should be given to the facts. At present, we are assured that, unless to the specially initiated, even the name of the company whose business is professed to have been purchased, in the prospectus of the Union Bank of France and England, is unknown in the City of London.

GOLD MINING IN WALES.

From the Vigra and Clogau there have been no returns, because the machinery was not perfected, but it is believed that the prospects are very good.—At the Prince of Wales Mine there was a large experiment upon 80 tons during the week, and we should like to know the result, as various reports have been forwarded to us to yield.—A considerable amount of business has been done during the week in the shares of the Cambrian, and the market closed firm at 21/2 to 3 prem. It is understood that experiments have been made upon some of the produce, the result of which is very satisfactory. It has been determined to commence operations forthwith upon an extensive scale.—The Sovereign is progressing favourably, and the prospects are spoken of as being of an encouraging character.—Relative to the property of St. David's, it is stated that wherever the veins have been opened they are found to contain gold, and that every kind of mineral contained in them is mixed with gold; and that from the geological conformation there is reason to believe that this property contains a rich mineral channel of ore-bearing ground. Capt. David Richards states that operations were commenced on Oct. 21, and that all the ore previously raised had been collected ready for crushing. All the preparatory work is being progressed with. Capt. K. Roberts states that the set is of a very extensive character, and that operations upon the course of the lodes, east and west, can be prosecuted upon a large scale. Several lodes of great promise have been discovered. Subsequent explorations (Capt. Roberts states) will in a short time justify this property ranking with the best paying mines in Merionethshire.—East Clogau is favourably spoken of by Capt. Roberts. Referring to the St. James's lode, he states that, from all appearances, it is likely to be of immense value to the company, and that the St. David's lode is from 3 to 4 feet wide, and maintains its late promising features.

We have received the following report from Mr. Jos. Mosheimer:

TO THE DIRECTORS OF THE TYDDYNGIWADIS SILVER-LEAD AND GOLD MINING COMPANY. Oct. 25.—In accordance with your request, I have inspected the property of the company, and found on the Tyddyngiwadis proper the miners engaged in continuing the old lode. The lode is from 3 to 5 ft. wide, containing alternately rich bunches of silver and lead ores. A shaft is sunk on the lode by the former proprietor about 60 feet below the level; this shaft ought to be cleared out, and the lode tested at a greater depth. There is a quantity of ore in sight, which may be taken out as soon as a space is prepared outside to store it, as the ore already broken out occupies nearly all the available space. I recommend that the wall along the river be continued, in order to prepare space for dressing-floors. The levels driven on the Cwmheolau lode produce the same quality of ore as the Tyddyngiwadis level. To make the ore marketable it has to be dressed; but, before this operation is commenced, I would recommend that the ore be carefully tested whether silver, and to what extent, is contained in the matrix which in dressing of the ore is lost. Should the matrix prove as rich in silver as the galena, or nearly so, I would then recommend that reduction-works should be erected to extract the silver and lead on the premises. Proper dressing apparatus has to be procured, as hand-dressing is too expensive, and is attended by a great loss of metal. The water-wheel is nearly in working order, and will give sufficient power to work the rollers. Another wheel has to be erected nearer to the river to work the other machinery. A set of assay tools is unavoidably necessary, as the ore has to be continually tested to determine its value; this apparatus ought to be procured without delay. By the adoption of proper machinery, and careful and economical working, I believe this mine will prove very remunerative.

TO THE DIRECTORS OF THE CWMHEOLAU GOLD MINING COMPANY (LIMITED).

Oct. 25.—On receipt of your secretary's letter, by which you appoint me to superintend the works of the Cwmheolau Gold Mine, I went in company of Capt. Williams to examine the property of the company. First, we went to the so-called Waterfall lode. There a level has been commenced by the former owners, and a lode has been struck. The condition of this lode we could not ascertain, as the level has to be cleared before the extent of the lode can be seen. The ore which has been taken from this level contains a large quantity of galena, mixed with iron and copper pyrites; the ore looks very promising, and I would recommend that this lode be opened out, as I think it will prove a paying one. From this point we traced the lode up to near the reduction works, where a shaft has been sunk by Capt. Williams, when employed by the former proprietors. This shaft is, according to his statement, 13 fms. deep, and was sunk with the intention of running a level to intersect the lode. I recommend that this level be cut at once. As the shaft is full of water I would recommend that a small water-wheel be erected, for the purpose of clearing the shaft as well as to raise the stuff. The old pumps being still in the shaft may be used again, and as the iron for connecting rods is on the ground, it will cost but little to open out a good lead lode at a very convenient place—near to the reduction works. Capt. Williams has a very high opinion of this lode, and from all appearances, from which I am able to judge, this lode will prove very remunerative. Above the reduction works is the so-called Gold lode; this is not a single lode, but a junction of a great many lodes, which is from 40 to 50 ft. wide. An enormous quantity of quartz can be got here at little expense; this quartz is intermixed with sulphurates of iron, copper, lead, and zinc. I found no visible gold in the quartz, but obtained several specks of gold by washing a few pounds of the mica stuff taken from the lode in question, which I consider very satisfactory; and, if all the stuff yields in the same proportion, this will be a very valuable mine. I would recommend that a shaft be sunk right in the centre of these lodes, from 15 to 20 fathoms deep, and do not doubt that rich ore will be found there than found in the present level. By this shaft the bearings of the lode will also be better ascertained. That gold has been found in the quartz is sufficiently proved by assays, and, judging from my experience, I have confidence in gold lodes where a small quantity of gold is found in the quartz, as they generally improve at a greater depth. Several open cuts have been made, and short levels driven, by which a large quantity of quartz has been raised, and is now on the ground ready for working. I would recommend that this quartz be worked up at once, and thus try to ascertain, by working 10 to 20 tons of quartz from each level, the richness of the same, in order to erect larger works should the result warrant the outlay. For the present I recommend that four or five heads of stampa be erected, with necessary amalgamators and a grinder. There are buildings on the property sufficient for this machinery. The water-wheel to drive the same is in working order. The Berlin pans and rollers may be used at present to grind up the quartz till proper stampa are erected. The rollers may be used to reduce the lead ore. A set of assay tools is unavoidable necessary, as the ore has to be continually tested to determine its value. This apparatus ought to be procured without delay.—**Jos. Mosheimer.**

IRON TRADE OF SWEDEN.—It appears that the iron trade of Sweden has sustained a severe check from the effects of the civil war in America. The decrease in the export from Gothenburg last year, as compared with 1860, amounted to no less than 11,427 tons, the shipments during the last five years having been as follows:—

1857..... Tons 31,570 | 1860..... Tons 40,404

1858..... 26,350 | 1861..... 28,613

1859..... 40,406

The stock of iron on hand at the close of 1861 was 26,500 tons, being 9000 tons more than in 1860.

COPPER MINING IN SOUTH AUSTRALIA.—The progress of the mining interest continues on the increase in the various parts of the colony. In the north there is some very rich ore brought down from the Daly, and a road is being cut to the Duminick to bring down the rich ore of that mine. The Yudanamutana Company's mines continue very satisfactory, and a great number of drays are now employed; already about 75 tons of very rich ore have left the Blinman, a great part of which has reached Port Augusta, and the Yudanamutana Mine was also adding to the stock for shipping. The company have engaged freight per the *Ayerst*, for the dead weight required under her hold. A great number of drays are constantly employed in bringing down the ore for shipment. During the month several rich lodes have been opened, some of them so rich and so large that the ore is quarried out and sent away in blocks. On Yorke's Peninsula the productiveness of most of the mines is increasing, and unless we have an addition to our shipping, there will soon be some difficulty in obtaining freight.—*Australia and New Zealand Gazette*, Oct. 16.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Oct. 31, 1862.

COPPER.	£ s. d.	BRASS.	Per lb.
Best selected.....	ton 101 0 0-	Sheets	10 1/2d. —
Tough cake.....	" 99 0 0-	Wire	9 1/2d.-10d.
Tile	" 99 0 0-	Tubes	11 1/2d.-12 1/2d.
Burns Burns	" 101 0 0-		
Copiago	" 0 1 1/2-	FOREIGN STEEL.	Per Ton.
Copper wire	p. lb. 0 1 1/2-	Swedish, in kegs (rolled) 15	0 0-15 10 0
ditto tubes	" 0 1 1/2-	(hammered). 16	0 0-
		Ditto, in fagots	16 10-18 0 0
		English, Spring	18 0 0-23 0 0
		Bessemer, Engineers Tool	44 0 0-
		" Spindles	30 0 0-
		QUICKSILVER.....	7 0 p. bottle

IRON. Per Ton.

Bars, Welsh, in London.	6 10 0 -	SPELTER.	Per Ton.
Ditto, to arrive	6 10 0 - 6 15 0	Foreign	18 0 0-15 5 0
Mail rods	7 0 0 -	To arrive	18 0 0-
" Stafford, in London	7 7 6 - 10 0 0		
Bars ditto	7 5 0 - 8 0 0		
Hoops ditto	8 5 0 - 8 10 0		
Sheets, single	9 0 0 - 9 10 0		
Pig, No. 1, in Wales	3 0 0 - 4 0 0		
Refined metal, ditto	4 0 0 - 5 0 0		
Bars, common, ditto	5 10 0 -		
Ditto, merchant, in Tress	6 10 0 -		
Ditto, railway, in Wales	6 0 0 -		
Ditto, Swed. in London	11 15 0 - 12 10 0		
To arrive	11 15 0 - 12 10 0		
Pig, No. 1, in Clydes	2 15 6 - 2 18 0		
Ditto, f. o. b. in Tees	2 8 0 - 2 10 0		
Ditto, forge, f. o. b. in Tees	2 5 0 -		
Staffordshire Forge Pig	-		
Welsh Forge Pig	-		

LEAD. Per Ton.

English Pig	20 0 - 21 15 0	LEAD-PLATES.	Per Ton.
Ditto sheet	21 10 0 - 21 15 0	IC Charcoal, 1st qua. p. bx.	8 0 - 1 8 6
Ditto red lead	22 0 0 -	IX Ditto 1st quality	1 14 0 - 1 14 6
Ditto white	23 10 0 - 30 0 0	IC Ditto 2d quality	1 4 6 - 1 6 0
Ditto patent shot	23 0 0 -	IX Ditto 2d quality	1 10 0 - 1 12 6
Spanish	20 10 0 -	IC Coke	1 2 6 - 1 3 0
		IX Ditto	1 8 6 - 1 9 0
		Canada plates	p. ton 12 10 - 13 0
		In London	20s. less on the works.
		Yellow Metal Sheathing ..	p. lb. 9 1/2d.
		Sheets	p. lb. 8 1/2d.-9 1/2d.
		Indian Charcoal Pigs	6 12 6 - 6 15 0
		In London	18 0 0 -

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—During the past week there has been rather less activity in our market; this is chiefly attributable to a falling off in the speculative demand, but a fair amount of business is doing, however, both for export and home consumption. Shipments of metals to the Continent are on the increase, and some improvement is also manifested in the demand for America.

COPPER.—Market very quiet; manufactured can now be bought in second hands slightly under fixed rates. Buyers very shy. Cake, tile, and ingot is firm at full prices, and in moderate request, mostly amongst consumers. Foreign is only in limited demand, at current rates. Holders do not press sales, having confidence in the stability of the market.—**Burns Burns, 1012.**

YELLO METAL.—Braziers sheets can be purchased freely at 1d. to 1d. per lb. under price. Sheathing continues to be quoted at full price, which is, however, only nominal.

IRON.—Railway bars in good ordinary request, and firm at quoted rates. Merchant bars are now more in demand, and price steady, at 61. at the works and 61. 10s. to 61. 15s. in London. Staffordshire descriptions steadily in demand at full list prices. Swedish bars are more active, and price advanced about 5s. per ton—111. 15s. to 127. The Bombay market has improved, and large shipments are being made thither. Scotch pigs have declined about 1s. per ton, now quoted 56s. mixed numbers, g.m.b., f.o.b. in Glasgow.

SPELTER.—This metal has undergone a considerable reaction, which has caused the price to decline to 171. 15s. This is a very low figure, and, doubtless, offers a most favourable opportunity for buyers to get in, either with a view of making an average with purchases already made at the higher rates, or merely on speculation. It is highly improbable, looking at the reduction in stocks, and the price at which large purchases were recently effected, that a much lower point can be reached; but, on the other hand, when the effect of this sudden reaction wears off the price is most likely to advance steadily to the extent of about 20s. per ton, at least: 150 tons sold to-day at 181. market closing buyers.

ZINC.—In good demand at 231. 5s. to 231. 10s.

LEAD.—Common English pig is now in better request, and sellers very firm at 211. WB is quoted 211. 10s. to 211. 15s., which is proportionately 15s. to 20s. per ton below the average difference. Bar and pipe more enquired for; sheets and shot slow of sale. Spanish pig advanced to 201. 10s.

TIN.—English extremely quiet, but firm at present prices.

and approaching these levels, is brought to them, with an extension of the rails or the wagon or ship; when the fore shaft is communicated to these points this part of the mine will be in a state of improved production, and we shall be in a position to commence a better class of copper pyrites. Our raisings have been:—Pyrites, 19,000 tons; chalcopyrite, 3,000 tons; precipitate, 5 tons; total, 22,005. We have also raised a further quantity of about 1200 tons of pyrites, which, at a small outlay of 1s. 6d. per ton, will be made marketable. The general prospects and capabilities of the mine have been more satisfactory; while the chief parts of the old mine, the new shafts to be opened below the 60 in the north mine and to the west, all afford a reasonable certainty of progressive discovery of ore as our levels proceed. Our machinery, at the present time, is in good and efficient order; and our various points of production are in a satisfactory state of working.

The following are the Government Returns of the exports of articles

connected with mining, the produce and manufacture of Great Britain, for the months ending Sept. 30, 1862; and also as compared with the nine months ending Sept., 1861; extracted from the "Accounts relating to Trade and Navigation," published by the Board of Trade:—

DECLARED VALUE FOR THE EIGHT MONTHS ENDING SEPTEMBER 30.

1861. 1862. Increase.

Iron and steel £2,744,832 £2,892,385 £147,553

Bar and cast iron 2,195,991 2,390,906 —

Forges and cutlery 211,709 —

In surgical instruments 326,565 = 2,929,180 433,789

In agricultural implements —

Machinery £ 943,258 —

Other series 2,176,463 = 3,119,721 1,783,698 = 2,950,618 —

Total £8,359,944 £8,772,183 —

Net loss:—Iron 786,613 £ 948,356

Bar, cast 1,395,466 1,657,381

Barrel 2,413,304 2,183,697

Wear 161,989 205,463

Gas 165,720 219,132

Gas 499,920 419,738

Gas 631,505 739,451

Wrought 1,496,218 = 7,551,733 1,590,125 = 7,933,253 —

Total 524,196 650,504 —

Net loss:—Wrought 355,974 391,888

Gas 1,076,112 1,466,272

Wrought 189,221 = 1,621,307 127,308 = 1,985,368 —

Total 119,561 185,729 —

Net loss:—Gas 914,594 552,304

Gas 112,986 = 427,580 144,262 = 696,562 —

Gas 275,535 381,256 —

Gas 655,275 981,964 —

Total 76,682 70,520 —

Grand total £19,612,113 £21,627,339 — £1,990,491

Net decrease:—Machinery, 169,103.; zinc, 61622. — 175,265

Total increase £1,815,226

At the Redruth Ticketing, on Thursday, 2310 tons of ore were sold, realising 12,538.1s. The particulars of the sale were:—Average standard, 12s. 6d.; average produce, 6s.; average price per ton, 5s. 8s. 6d.; quantity of fine copper, 154 tons 15 cwts. The following are the particulars:—

Tons. Standard. Produce. Price per ton. Ore copper.

2,320 £125 6 0 6s 7s 25 10 0 £25 7 0

4061 127 7 0 6s 5 2 6 82 16 0

2,466 121 6 0 7 5 14 0 82 0 0

5029 126 9 0 6 4 15 6 80 4 0

2,310 122 3 0 6s 5 8 6 80 1 0

Compared with last week's sale, the standard is about stationary. Compared with the corresponding sale of last month, the decline has been in the standard 4s., and in the price per ton of ore, 5s. 6d.

At the Swanso Ticketing, on Tuesday, 1448 tons of ore were sold, realising 17,072.0s. 6d. The particulars of the sale were—Average standard, 10s. 6d.; average produce, 13s.; average price per ton, 11s. 16s.; quantity of fine copper, 199 tons 2 cwts. The following are the particulars of the sales during the past month:—

Tons. Standard. Produce. Price per ton. Ore copper.

20 1882 £109 10 6 11s. 5s. £10 5 6 £20 6 0

17 1655 102 19 0 14 13 18 11 19 6 87 12 0

21 1448 102 6 0 13s. 11 16 0 85 14 6

Compared with the last sale, the decline has been in the standard 2s., and in the price per ton of ore about 5s. 6d. Compared with the corresponding sale of last month, the decline has been in the standard 4s., and in the price per ton of ore about 13s. 9d. Of the 1448 tons sold on Tuesday, 1121 tons were British ores, which gave an average produce of 10s. 6d., and sold at an average standard of 10s. 1s. = 9s. 16s. 6d. per ton; the remaining 327 tons were foreign ores, which gave an average produce of 21s., and sold at an average standard of 9s. 6s. = 18s. 11s. per ton. On Nov. 18 there will be offered for sale about 1346 tons from Gwernan, Berehaven, L'Aventura, Schull Bay, Mount Gabriel, Bampfylde, Kammantoo, and West Kame.

The following dividends have been declared during October:—

Mines. Per share. Amount.

East Caron £ 1 0 0 £2144 0 0

Vaux and Cloquet 1 0 0 4200 0 0

Leach 7 0 0 2506 0 0

West Ludicott 10 0 0 2400 0 0

Parry Mines 10 0 0 2000 0 0

West Wheal Seton 5 0 0 2000 0 0

Maris Valley 0 4 0 1890 0 0

Broadfoot 1 15 0 1792 0 0

Wheat Clifford 0 10 0 1450 0 0

Wheat Bassett 2 0 0 1024 0 0

Great Wheal Fortune 0 10 0 899 0 0

Wheat Seton 2 0 0 792 0 0

West Caron 0 10 0 512 0 0

Powderhouse Consols 0 2 0 402 12 0

East Pool 2 10 0 320 0 0

United Mexican 0 5 0 19793 10 0

Central American 0 14 6 4350 0 0

West Canada 0 2 0 2000 0 0

Total £54,385 2 0

At Great Wheal Fortune meeting, on Wednesday (Mr. T. W. Robinson in the chair), the accounts showed a credit balance of 2730. 1s. 11d. The profit on the two months' working was 1760. 8s. 10d. A dividend of 890. (10s. per share) was declared, and 1831. 1s. 11d. carried to next account. Further details will be found in another column.

At Penrhyn-drea Mine meeting, on Thursday (Mr. W. Jardine in the chair), the accounts showed a debit balance of 67s. A call of 2s. per share was made.

At the East Carn Brea Mine meeting, on Tuesday (Mr. C. J. Furlonger in the chair), the accounts, including an ore bill due Nov. 11, showed a balance of assets of 3179. The report of the agent, and details of the meeting, appear in another column.

At the Bronfoid United Mine meeting, on Monday (Mr. Thos. Miers in the chair), the balance-sheet (an abstract of which appeared in last week's Journal) and resolutions to subscribe 10s. towards the fund for building a school-room, were adopted.

At the Great Wheal Fortune meeting, on Oct. 22, the accounts showed a debit balance of 1881. 1s. 10d. A call of 8s. per share (about 18000.) was made, which, together with the value of the tin remaining unsold at the last sampling, in consequence of the breaking of the stamp driving-wheel in September, will suffice to meet present expenses. The costs of the current three months will, it is believed, be more than covered by the return for ore sold. Mr. Wm. Mathews reports that "The winding engine is working exceedingly well, taking its supply of steam from the large engine. This engine is put in thorough repair, and is a good and efficient engine. You will be pleased to know that our new powerful machinery to carry the mine out for many years to come; this addition will be an extra boiler, as the mine gets deeper, some years hence, will be required, and with machinery must say that it has been purchased at an exceedingly low price."

At Great Wheal Falmouth and Sperris meeting, on Oct. 23, the accounts

showed a debit balance of 527s. A call of 8s. per share was made. The appointment of Mr. George Mitchell as third surgeon of the mine was deferred. The tribute pitches

are general.

The mine is still making good returns.

At West Wheal Jane meeting, on Oct. 23, the accounts showed a credit balance of 231. 1s. 11d. The labour cost is charged to September, the merchants' bills to October. Capt. Tonkin and Smith report that "Though the engine is not looking so well as it did three months since, yet we consider our present stamping-power, and shall be in a position in a short time to stamp nearly as well as when we last took it on the mine. Our machinery is in an efficient state of working. We have now acquired with machinery must say that it has been purchased at an exceeded-

ly low price."

At Great Wheal Falmouth and Sperris meeting, on Oct. 23, the accounts

showed a debit balance of 527s. A call of 8s. per share was made. The appointment of Mr. George Mitchell as third surgeon of the mine was deferred. The tribute pitches

are general.

The mine is still making good returns.

At the Santa Barbara Gold Mine meeting, held in the Liverpool and

Chambers, Liverpool, on Oct. 24 (Mr. W. Harrison in the chair), for the purpose of discussing a resolution passed on Aug. 6, "That certain rules then submitted by the shareholders of the Joint-Stock Companies Act, 1862," the Chairman having stated in the course of the meeting, intimated that the rules would be re-read if the shareholders de-

sidered necessary.

The Chairman moved their adoption, which was seconded by

Mr. George Tonkin, and adopted unanimously. The business for which the meeting had been convened being concluded, the Chairman read an extract from Captain Bryant's speech, dated Sept. 11, as follows:—"We expect by the end of September, to get the

new road, 3000 ft. long, cut for landing, when erected, tramroad laid in the adit level, and

the interior of the mine, from the surface or pit mouth by arbitrary signs; thus, for example, a continuous red light may be used to signify "danger from fire-damp"; two movements may mean "send down the cage," and so on, and in like manner, one, two, or more flashes or illuminations in vacuo may be used to signify pre-arranged sentences. They also employ the pressure contact to connect an electric circuit through a Rahmkoff coil and condenser, and by causing the current to pass thence between two metal points placed in vacuo in the interior of a glass bulb or chamber to illuminate such a bulb or chamber, and employ the like pressure contact to connect an electric circuit through a Rahmkoff coil and condenser, and by an electro-magnet or galvanometer withdraw an opaque slide from the front of back of a coloured bulb's eye in a Davy lamp, and expose the coloured light. They employ the drawal and withdrawal of the slide in a Davy lamp by the means mentioned, and also the illumination of the bulb or chamber, for the purpose of telegraphing or communicating signals from one part of a mine to another part thereof and from the interior of the mine, from the surface or pit mouth by arbitrary signs; thus, for example, a continuous red light may be used to signify "danger from fire-damp"; two movements may mean "send down the cage," and so on, and in like manner, one, two, or more flashes or illuminations in vacuo may be used to signify pre-arranged sentences. They also employ the pressure contact to connect an electric circuit through a Rahmkoff coil and condenser, and by causing the current to pass thence between two metal points placed in vacuo in the interior of a glass bulb or chamber to illuminate such a bulb or chamber, and employ the like pressure contact to connect an electric circuit through a Rahmkoff coil and condenser, and by an electro-magnet to sound an alarm, ignite an explosive compound (at the surface, of course), or otherwise indicate danger. The fire-damp may be dispersed as general by the pressure contact completing the circuit, and igniting some explosive compound.

TAPPING'S HANDBOOK ON JOINT STOCK COMPANIES: WHAT TO DO, AND HOW TO DO IT.—This work, explanatory of the new law and its application to Joint Stock Companies, will be published, and ready for delivery, early in the ensuing week, at the *Mining Journal* office, 26, Fleet-street. Price, 2s. 6d.

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THE SOVEREIGN GOLD MINING COMPANY (LIMITED).

Completely registered.

Incorporated under the Joint Stock Companies Acts, 1856-57.
Capital, £250,000, in 50,000 shares, of £1 each.
Deposit on application £5, and £5 on allotment.

DIRECTOR.

RICHARD HALLETT, Esq., 20, St. Helen's-place, Bishopton.

CHARLES ROBERT ESSEX, Esq., East India Chambers, Leadenhall-street, City (Director of the Worthing Mining Company).

HENRY JORDAN, Esq., 7, Albemarle-street, Piccadilly.

CHARLES FOXON COZENS FOXON, 7, Sutherland-place, Pimlico.

BANKERS—The City Bank, Threadneedle-street, City, E.C.

SOLICITOR—D. P. Hindley, Esq., 10, Old Jewry Chambers, City, E.C.

SECRETARY—Mr. Henry Peet.

OFFICES—10, OLD JEWRY CHAMBERS.

ABRIDGED PROSPECTUS.

This company is formed to purchase and work for gold an extensive mineral property in North Wales, about three miles from Dolgellau. It comprises nearly 400 acres, and immediately adjoins the Prince of Wales Gold Mine, and the Imperial. The celebrated Clogau and the Cambrian Gold Mines are a little to the west, other mines are in continuation eastwards. The rich lodes operated on in all these mines are identical in character with those in the Sovereign Gold Mine. The soil contains several known gold-bearing lodes, one of which is the largest in the district. There are great facilities for working by adit levels when the outcrop is worked out, but which will last many years, with a never-failing supply of water-power, sufficient for all purposes.

Several tons of quartz have been broken from the main lode lately, from the greatest depth attained, proving highly auriferous. The following are the results of assays of the same made by Messrs. Longmaid and Lisabe:—

City Laboratory and Assay-office, 31, Throgmorton-street, London, Sept. 4, 1862.

I hereby certify that I have examined three samples of quartz received from the Sovereign Gold Mine, and that they contain as under:—

No. 1.—Lead	42½ per cent.
Gold	4 ozs. 15 dwts. 16 grs. per ton.
No. 2.—Gold	2 ozs. 5 dwts. 17 grs. "
Silver	0 ozs. 9 dwts. 19 grs. "
No. 3.—Gold	7 ozs. 0 dwts. 11 grs. "
Silver	0 ozs. 19 dwts. 14 grs. "

(Signed) JOHN LONGMAID.

Sept. 18, 1862.—The specimens of gold-bearing quartz from the Sovereign Gold Mines I have ascertained contain over 3 ozs. of gold to the ton of ore, or 20 dwts.

(Signed) FRANCIS LISABE.

Since the above results were obtained, a deputation from the board of directors have visited the mines, and the following the result obtained from quartz broken by them out of the main lode at the surface.

Assay-office, 77, Hatton-garden, London, Sept. 26, 1862.

The samples of quartz from the Sovereign Gold Mine have been carefully crushed and assayed, and found to contain the following proportions of gold, silver and lead:—

Gold	1 ozs. 12 dwts. 0 grs. per ton of 20 dwts.
Silver	3 ozs. 5 dwts. 12 grs. "
Lead	4½ per cent.

(Signed) JOHNSON, MATTHEY, & Co.

A statement of the financial position of the company will be forwarded to the shareholders every three months, and general meetings held half-yearly.

Detailed prospectuses, reports, and plans, with forms of application for shares, may be obtained at the offices of the company, where specimens of the gold quartz broken at the mine may be seen.

Just published, royal 4to., cloth, illustrated by 84 plates of furnaces and machinery, price £3 10s.

THE IRON MANUFACTURE OF GREAT BRITAIN, THEORETICALLY AND PRACTICALLY CONSIDERED:

Including Descriptive Details of the Ores, Fuels, and Fluxes Employed; the Preliminary Operation of Calcination; the Blast, Refining, and Puddling Furnaces; Engines and Machinery, and the Various Processes in Union, &c.

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Second edition, revised from the manuscript of the late Mr. Truran.

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By W. P. JERVIS, F.G.S.,

Assistant-General to the Italian Special Commissioners for the Exhibition.

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DEPOSITION OF LEAD ORE: An Enquiry into the Deposition of Lead Ore in the Mineral Veins of Swaledale, Yorkshire.

By LONSDALE BRADLEY, F.G.S.

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Now published, by WILLIAM OLIVER, Mining Engineer, Stanhope, a

MAP OF THE COAL MEASURES in the Counties of Northumberland and Durham, and the Lead Measures of the County of Durham, and part of Northumberland and Cumberland; showing the Outcrop of the New Red Sandstone, Magnesian Limestone, Coal Measures, and Millstone Grit; also, the Carboniferous Limestone Deposit, Collieries, Lead Mines, Adits or Levels, Faults, Valleys, Dykes, and other Interruptions; with the Railways, Rivers, Towns, Ports of Shipment, &c. Scale, 1 in. to the mile.

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Scale, 1 in. to the mile.

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BY J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

The SEVENTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 29, 1860, and January 5, 1861.

A FEW COPIES of the REVIEW of 1855, containing Statistics of the Metal Trade and the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL's Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CURELL.

MINING PREDICTIONS.—"S." should have addressed his communication to "A Gentleman." We cannot reprint the letter published in the Journal of August, 1861. COLLIER WORKERS.—We have received a lengthy communication from Mr. G. G. Herd, in reply to Mr. J. Naysmith; but we think the discussion had better now be omitted. Both gentlemen have already fully recorded their views, and can more advantageously occupy their leisure by prolonging a controversy that cannot be of much interest to any, while our space can be devoted much more satisfactorily to the general reader.

TAVISTOCK MINING.—The letter of "Zero" can only appear with the writer's name attached.

MINING PHOTOGRAPHS.—The first of the third series of Mr. Henwood's papers will appear in next week's Journal.

* * * With the Journal of Oct. 11 we gave a SUPPLEMENTAL SHEET, containing the conclusion of the article "Railways—Who is their Father?" The report of the Annual Meeting of the Miners' Association of Cornwall and Devon; the report of the Manchester Association for the Prevention of Steam-Boiler Explosions; the Quarterly Sales of Copper Ores in Cornwall; an Account of the Mineral Resources of Portugal; Iron and Steel Direct from the Ore; Improvements in Pump-Substitute for Gunpowder, &c.

* * * With the Journal of Sept. 27 we gave a SUPPLEMENTAL SHEET, containing—An Enquiry into the Origin of Railways; Government Inspection of Mines (conclusion); Improved Turbine Water-wheel; Double Shafts and Adits; the Geologists' Association Visit to the International Exhibition; Yorkshire Ores; Mining Enterprise in Australia; Port Phillip Company; the Petroleum Trade; Gigantic Iron Casting; Crystallisation of Iron; New Propelling Power.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, NOVEMBER 1, 1862.

The Board of Trade Returns, for the month and the nine months ending Sept. 30, have been issued. With respect to the exports of articles, the produce and manufacture of this country, they show a total declared value of 93,672,434. for the three quarters of this year, which, compared with the aggregate for the same period of last year, is a decrease of 122,898, and 8,051,912. as compared with 1860; the amount for 1861 being 93,795,332. and 101,724,346. for 1860. For the month of September in this year the total is given as 11,396,327. against 11,220,206 in 1860 and 13,646,454. in 1860, being, consequently, an increase of 176,121 over the month of last year, but a decrease of 2,250,127. as compared with August, 1860.

It is satisfactory, however, to find that notwithstanding the deficiency in general balance of shipments, there is again a marked improvement in the exports of articles represented by the mining interests of the kingdom—in fact, in two items only, is the amount less than last year—namely, in machinery and zinc, the former showing a falling off to the extent of 169,103., and the latter 61,621. For the nine months the declared value is 21,627,330. for 1862, and 19,612,113. for 1861, giving, therefore, an excess of 1,815,226. in favour of this year. The principal increase is in hardware and cutlery, the difference being 433,789. Iron goes 381,520 over 1861; copper, 364,061.; tin-plates, 326,689.; coal and culm 147,553.; steel, 126,308.; tin unwrought, 105,421.; lead, 68,982; and brass, 36,168.

Presuming that the returns for the entire year will be in proportion to those for the nine months, the total exports may be estimated at about 125,00

prosecuted, handsome returns will be the result. It is a matter of astonishment that mining speculators have not paid more attention to this neighbourhood, which abounds with exceedingly favourable indications of lead and copper. Mr. David Lloyd, of Blaenau, has commenced working the Pantyffynon Colliery, Cross Inn. The colliery has been stopped for many years, and its starting has given quite an impetus to the local trade. The traffic receipts of the Llanelli and Llandilo Railway fully testify to the improved state of things, the increase since the commencement of July being upwards of 19 per cent., as compared with the corresponding period of last year.

Another case of smoking in the No. 2 Gethin Pit has been heard before the Merthyr magistrates. The defendant was an old collier, named William James, who admitted the offence, and expressed his sorrow for what had occurred. Mr. Moody, the manager, gave him a good character. Mr. Fowler, the stipendiary magistrate, said in consequence of defendant's old age and good character he would not be sent to prison. Defendant was fined 40 and costs, or fourteen days' imprisonment.

A case of considerable importance was decided at the last Aberdare County Court, by Judge Falconer. Lewis Jones, an engineer, sued Mr. John Nixon, the well-known colliery proprietor, for 17. 3s. 11d. The plaintiff had been an engineer in the employ of the defendant, and he left without giving one month's notice. The payment of the current wages was sued for, and it was contended that the plaintiff was not under any obligation to give notice. Judge Falconer delivered a very lucid judgment, of which the following is a summary. The plaintiff said he never had a copy of the rules, and that he was in the employ of defendant before any rules were distributed. The defendant, on the contrary, said plaintiff had the rules; as a proof of which an old copy had been found in the engine-room, and no engineer had gone away without notice. In the case, however, of Bayley v. Wilkins, it was held that where a party must know some rules were necessary for conducting certain transactions he must be bound by those rules. It was of opinion that of all the men employed the plaintiff, above all others, was, from the terms of the rules, and from the necessities of the colliery, subject to conditions before he could leave. Judgment was given for the defendant.

The arrivals at Swansea include—the San Jose, from Santiago de Cuba, with 630 tons of copper ore, for Richardson and Co.; Conqueror, from Huasco, with 510 tons of copper regulus, and 70 tons of copper ore, for H. Bath and Son; Flying Spray, from Guayan, with 530 tons of bar copper, and 9 tons of silver ore, for H. Bath and Son; Wurtemburg, from St. Paul de Loando, with 655 tons of copper ore, 33 tons of silver ore and oil, for Williams, Foster and Co.; Florence, from Cuba, with 521 tons of copper ore, for the Cobre Company.

ASSOCIATION FOR THE PREVENTION OF STEAM-BOILER EXPLOSIONS, MANCHESTER.—At the last ordinary monthly meeting of the executive committee, held at the offices, Corporation-street, Manchester, on Tuesday, Mr. William Fairbairn, C.E., F.R.S., in the chair, Mr. Fletcher, chief engineer, presented his report, of which the following is an abstract:—During the past month there have been examined 353 engines and 539 boilers. Of the latter, 9 have been examined specially, 9 internally, 49 thoroughly, and 473 externally, in which the following defects have been found:—Fracture, 7 (1 dangerous); corrosion, 30 (3 dangerous); safety-valves out of order, 15; water-gauges ditto, 7; pressure-gauges ditto, 20; feed apparatus ditto, 7; blow-off cocks ditto, 27; furnaces out of shape, 3; blistered plates, 5; total, 121 (4 dangerous). Boilers, without glass water-gauges, 8; without pressure-gauges, 7; without blow-off cocks, 18; without back pressure-valves, 50. Three explosions have occurred during the past month to boilers not under the inspection of this association. These boilers were in the iron districts, and of the externally-fired haystack class. They were reported as having been of original defective construction, being insufficiently stayed. One of these explosions was attended with fatal consequences, the engineer being killed.

INCURSTATION, AND SCUM-PIPES.—The number of boilers under inspection which suffer from incrustation is very large; indeed, to escape this inconvenience is quite exceptional. Under ordinary circumstances, the most practical plan for the prevention of incrustation is the adoption of an efficient mode of "blowing out," and not the use of "boiler compositions." To blow out, however, from one point only, at the bottom of the boiler, is the general custom, but has a very limited and local effect. This is frequently remedied by the adoption of a perforated pipe, which is connected to the ordinary blow-out tap, and carried along the bottom of the boiler from one end to the other. These are technically termed "Topham pipes," from the name of the patentee, and are generally spoken highly of by those who have adopted them. They are, however, more successful where the sediment, being heavy and sticky, falls to the bottom, rather than where it is of a lighter character, which frequently forms the hardest and most tenacious scale. From the rapid ebullition that takes place within boilers when under steam, it is found that a greater part, if not the whole, of the sediment set free by evaporation rises to the top of the water, forming a coat of scum, before finally depositing itself upon the furnace-tubes or shell; and thus the readiest way of preventing incrustation is to blow out this layer of scum from the surface of the water by means of a scum-pipe, before it has an opportunity of settling. There is nothing new or experimental in this; the system has been for years adopted with marine boilers, and there is no reason why its use should not become equally general with stationary ones. Many of our members have already tried it with considerable success, and find, on opening their boilers after a month or six weeks' work, that where they used formerly to be coated with a heavy muddy deposit they are now perfectly clean. The following is an explanation of the description of pipe adopted:—It is about 3 or 4 in. in diameter, having a wing cast to it on each side, so as to form a trough throughout the entire length of the pipe. This pipe is carried within the boiler, from one end to the other, being made in any convenient lengths for introduction at the man-hole. It is perforated with small holes on the top all the way along, the aggregate area of the whole number of these holes being equal to that of the pipe itself. The top of the trough is fixed a few inches below the level of the water, so that the scum on the surface may flow over it, when, being guarded from the disturbance of the ebullition, it departs in the still water above the trough the sedimentary particles held by it in mechanical combination. A tap is fixed to the front end plate of the boiler, in communication with this pipe, by means of which it can be blown out as frequently as is desired, which should not be less than once every two hours, when ebullition is going on. This tap, which need not be more than 2 in. in diameter, should be entirely of brass, fitted with a gland, and have a neat waste-pipe attached, which may be of wrought-iron, while, also, the waste-pipes from the glass water-gauges may be connected to it, being led immediately under the dead plate, which arrangement is found to be very compact and convenient. The best position for the scum-pipe is at the side, and not at the centre, of the boiler, both on account of facility in fixing, and convenience in getting inside. A single pipe is sufficient. There are other plans in operation which, however, are subject to patent right. One of those consists of a series of vertical pipes fixed in the centre of the boiler, each pipe having a trumpet mouth, to which a vertical telescope movement is given, to allow for the changes of water level, the movement being effected by a copper ball float, so that the trumpet mouth rises and falls on the changes of water level, like a buoy on the rise and fall of the tide; the object being to keep the mouth of the pipe immediately below the surface of the water, in close proximity to the scum. A second plan consists of a trumpet mouth laid horizontally. Both of these arrangements are reported to give satisfaction, and, whenever opportunity offers, the results of their working will be noted, and particulars of the plan found to be most successful communicated to the members. Some descriptions of incrustation, however, cannot be entirely removed by any blowing-out apparatus alone, however perfect; in such cases, a little carbonate of soda may be added, which many of our members have applied with considerable success. Of the use of this, their experience is decidedly in favour, while the testimony with regard to complicated "boiler compositions" generally is that they found them expensive, in many cases useless, in others injurious, and have, in the majority of instances, discontinued them altogether. For fuller chemical particulars refer to Dr. Angus Smith's report to the executive committee upon the incrustation in boilers. The use of soda, without a scum-pipe, is found in some cases to induce priming; the soda combining with the grease within the boiler, and producing foaming of the water. The general adoption of scum-pipes is, therefore, confidently recommended to the members, not only for the prevention of incrustation, but also, in order to lengthen the lives of their boilers, as well as to assist the engines in many cases, by preventing priming. The most radical cure for the prevention of incrustation, though one involving considerably more outlay, at the first, than the above, will be found in the adoption of dry or "surface condensation," by means of which the boiler is fed with distilled water, the same being used again and again, with the exception of the slight amount lost through leakage. To those who are paying large amounts annually for a supply of town's water, and where the steam is consumed for engine-purposes, the adoption of surface condensers is well worthy of serious consideration, not only on account of the saving in the water rates, but also in that of fuel, since non-condensing engines may, by this means, be converted into condensers, not at present generally the case where town's water is used.

REFINING IRON.—It has been proposed to substitute coal for the charcoal usually employed in the cementing troughs or cases in the manufacture of steel. The experiments of Macintosh prove that the cementation may be effected under the influence of a quantity of carbonated hydrogen, while coal on being calcined disengages a large quantity of hydro-carbures. It has, however, been found necessary to abandon both the process of Macintosh and the use of coal, on account of the steel produced being of bad quality. Having ascertained the causes which render these processes defective, Messrs. Margeritte and De Souvrel propose the adoption of a new process by which they hope to find a remedy. Both coal gas and coal in the purest state possess sulphurated products, which would combine with the iron, and as infinitesimal quantities of sulphur are sufficient entirely to change the quality of the iron or steel, it will be apparent that it is highly necessary to remove it. This may be effected in the most simple and economical manner by adding to the coal a certain quantity of lime or carbonate of lime, which at the high temperature to which the mixture is raised becomes transformed into quicklime, and retains in this state of sulphur of calcium not only the sulphur resulting from the distillation of the coal, but also that evolved in the furnace, which always filters into the cementing cases. The presence of the lime prevents an excess of sulphur being taken up by the iron, and also possesses the further advantage of removing the greater part of that which it previously contained; it thus purifies and refines the iron, and renders it more suitable for subsequent cementation, and, in fact, enables good steel to be obtained from iron of inferior quality. They effect this purification and desulphurization of the iron by means of hydrogen, which possesses (as is well known) the property, when passed over impure iron, of producing sulphurated hydrogen readily decomposable in lime. Carbonates of baryta, strontium, soda, or potash may be employed for producing the same result, but as these are either fusible or volatile, and also much higher in price than lime, they prefer the latter alkali as being completely infusible and of a fixed nature, besides being the cheapest of all the matters suitable for employment. The coal and quicklime, or the carbonate, are pulverized and mixed together in the proportions of from 15 to 20 or 25 per cent. of the quantity of coal employed. The coke residue of the cementing process is employed for heating purposes in the next operation. The apparatus they prefer to use are small retorts and furnaces, similar to those used by the Vieille Montagne Company for the manufacture of zinc. These retorts, by reason of their small dimensions, may be readily brought to a red heat, which is the most favourable for the cementation, while it is very difficult for the heat to penetrate to the centre of the ordinary cementing cases. It will be easily understood that such a furnace, containing from 40 to 50 retorts, would produce after a few hours' continuous action a considerable quantity of steel. The results obtained by calcining bars and plates of iron of bad quality in a mixture of coal and quicklime, or carbonate of lime, surpass all expectation, steel of very good quality being produced from which previously was unsatisfactory both for forging and bending. These improved processes may also be applied for the improvement of cast and malleable cast-iron. This invention, therefore, consists:—1. In the simultaneous purification, refinement, and cementation of iron by calcining it in a mixture of coal and alkaline carbonate or earthy alkali, preference in all cases being given to lime or its carbonate. 2. In the use of furnaces and retorts similar to those used in the manufacture of zinc, enabling the iron to be raised to the most favourable temperature for cementation, also rendering the operation continuous and economical by successive supplies of material. 3. In the employment of any other combustible material as a substitute for the coal capable of furnishing hydrogen by distillation, such as lignite, anthracite, peat, wood, and other matters mixed

with lime for the simultaneous purification and cementation of iron.—4. The simultaneous contact of non-carbonated hydrogen and lime, with iron divided into thin sheets for the purpose of purifying it only, without cementing it. In this case the hydrogen may be produced by passing steam over charcoal, or by the action of sulphuric or hydrochloric acid on zinc or iron. The hydrogen acting at a high temperature on the iron in contact with lime has the effect of purifying it, so as to change inferior iron into iron of very good quality.

THE NEW MINERAL OILS—No. I.

CONSIDERED AS A LEADING BRANCH OF OUR NATIONAL INDUSTRY.

It is but two years since the fact of the continuous yield of the oil wells of America gave sufficient proof that a new, very reliable, and constant source of supply of illuminating oil was established, and that the commercial world felt confident that a new and profitable source of trade was thus opened to it. The discovery of the oil wells of Pennsylvania, in fact, inaugurated a new epoch in commerce, for such is the importance of the article to the whole of the civilised communities living within the temperate and frigid zones, that it bids fair to rival in its domestic and commercial importance that article now absorbing so much of the attention of Europe—cotton. Indeed, the Federal States of America begin to look upon it as the great article of commerce which is to enable them to redeem their loss in the trade of cotton, for which the great commercial city of New York has heretofore been the chief entrepôt for the greater part of the world.

It is a very remarkable fact that nearly about the same time that the oil wells of Pennsylvania were discovered, there were also discovered to exist similar fountains of oil in Canada West, in British North America. The astute Yankee, however, was the first to turn the discovery to a good commercial account, and to develop a large business out of it. The value of the great, and apparently inexhaustible, yield of the oil wells of Enniskillen, Canada West, was left rather to be developed by English than by native enterprise,—as in the case of the colony's railways. Although a year later in the systematic development of its vastly important new source of richness, Canada now promises to greatly exceed in its produce of oil for European use the oil wells of its sister states of Pennsylvania and Ohio. English capital has been flowing in, through private enterprise and joint-stock projects, with a very strong current for some time. Indeed, it may fairly be asserted that since the gold discoveries there has not been so important an industry developed. It is a singular circumstance that the gold discoveries first developed in American territory were a year afterwards more fully equalised in importance to England by the discovery of gold in the British colonies of Australia, the influence in the extraordinary development of commerce being of almost co-equal importance to the two great Anglo-Saxon communities.

The discovery of the oil wells in the territories of their respective Governments is quite in parallelism in point of time and importance; and it would seem that whatever luck attends the commercial career of Brother Jonathan, we receive an equal share, without any thanks to him; and thus Providence seems to check the overbearing vanity of our younger brother, which has at last, however, brought him into the vortex of a fearful and most wanton of all kinds of political strife—civil war. We do well, therefore, not to mix ourselves up in this grand dispute, seeing the enormous riches which we have at stake in Canada—agricultural, mineral, commercial, and also as a vast outlet for our skilled artisans and our whole rural population.

Another singular circumstance in connection with the discovery of the American oil wells is the fact that the economical advantages of coal off as an illuminating material had been gradually established by the introduction of that article by Mr. Young, under the denomination Paraffin Oil, and had just previous to the American discovery of native oil made a great noise in the world, by the legal contests which took place in our law courts in respect to Mr. Young's right to be the sole manufacturer of oil from coal, however obtained. As Mr. Young was reported to be making 200,000, per annum by his patented process, extraordinary efforts were made to evade his patent, and to share with him the great profits thus presenting themselves to the inventive and commercial world. And the result has been that Mr. Young has the sole right to manufacture oil from coal in Great Britain and Ireland, and to all the profits he gets out of the great British public in the manufacture of oil so obtained. But a grand rivalry was kept up by the importers of oil made from schists, shales, and kindred minerals, on the Continent, under the name of phlogon and crystal mineral oils. A still greater rivalry, however, was apparently brought forward to crush Mr. Young's thriving trade, Nature herself having disclosed great and inexhaustible storehouses of the same oil, ready made to hand of all who would unlock the fastenings which held it, and provide suitable vessels for its safe transit to the storehouse of the merchant. It seemed that a deluge of oil would put out the fires of Mr. Young's factory, and at the same time set the whole world on fire, and thus enable the rivals of the great oil monopolist at last to come out of their legal difficulties with a blaze of triumph. Nevertheless, however, the patent oil holds its own customers, and the torrent of oil which has set in from the other side of the Atlantic finds itself absorbed by millions of greedy patent lamps daily, awaiting sundown to light up the domestic circles of our peaceful British homes, and there is no reason why its use should not become equally general with stationary ones. Many of our members have already tried it with considerable success, and find, on opening their boilers after a month or six weeks' work, that where they used formerly to be coated with a heavy muddy deposit they are now perfectly clean. The following is an explanation of the description of pipe adopted:—It is about 3 or 4 in. in diameter, having a wing cast to it on each side, so as to form a trough throughout the entire length of the pipe. This pipe is carried within the boiler, from one end to the other, being made in any convenient lengths for introduction at the man-hole. 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The general adoption of scum-pipes is, therefore, confidently recommended to the members, not only for the prevention of incrustation, but also, in order to lengthen the lives of their boilers, as well as to assist the engines in many cases, by preventing priming. The most radical cure for the prevention of incrustation, though one involving considerably more outlay, at the first, than the above, will be found in the adoption of dry or "surface condensation," by means of which the boiler is fed with distilled water, the same being used again and again, with the exception of the slight amount lost through leakage. To those who are paying large amounts annually for a supply of town's water, and where the steam is consumed for engine-purposes, the adoption of surface condensers is well worthy of serious consideration, not only on account of the saving in the water rates, but also in that of fuel, since non-condensing engines may, by this means, be converted into condensers, not at present generally the case where town's water is used.

The partisans of home made coal oil, however, are insidiously active to check the onward march of their great rival, the Petroleum oil of America. Parliamentary obstructions were sought, on the ground of its dangerously explosive properties, and by that means create a prejudice against all mineral oils except Paraffin, nobody having the right to call a mineral oil Paraffin without the license of Mr. Young. We wish it to be understood that we in no wise object to the precautions enforced by the Petroleum Act of last session, but merely indicate the sources of its origin as being not of that property disinterested kind which looks only to the public safety and good. Since then we have had formed a public company—the Canadian Native Oil Company (Limited)—to put in force an organised system of supply of the Petroleum. So far from the Act having checked the stream of mineral oil coming forward from America, it is, in fact, in the oil trade that is at all likely to suffer a depreciation is that of tallow, and which, in fact, is already forcibly felt, as the smell of tallow candles is now discovered to be quite as insufferable as that of the mineral oils, while the oils give a far better light, at half the price, and obviate the filthy mess made by tallow when used in any shape as an illuminator. We may also observe that with the improved form of lamps for burning these mineral oils the brilliancy of the light and its safety are quite equal to gas, and at the same time, free from the smoke and other impurities of gas, which are well known to deteriorate the purity of the vital air of rooms where gas is used. Can there be any reasonable doubt that with such advantages the demand for the new light must go on increasing in a still greater ratio than what has attended its introduction, as gas has now met with a rival against which it has no chance of competing in private houses? There is doubtless great room for the scientific chemist to exert his ability in the economical purification of these oils; and more especially in obviating the very objectionable odour which seems to pertain more or less to all descriptions of these oils in the London market, more particularly those from Canada. It is unquestionably a scientific chemical task of great difficulty, especially in respect to the singularly persistent and pungently offensive odour of the Canadian sorts. Indeed, he who shall be successful in discovering a process commercially adaptable for deodorising these highly objectionable Canadian oils will deserve to become a rich man, with the honour of possessing the gold medals of our Society of Arts, the Royal Chemical Society, and the Royal Society also, and of a nation's gratitude; for a more difficult chemical task it is scarcely possible to conceive, knowing as we do the great ability that has been brought to bear on it.

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The strange weather we have now passed through this month was accurately foretold in my letter in the Journal of the 4th inst. The severe gales and heavy floods occurred in the order predicted; but the most astonishing part of it is the great range to which these predictions are applicable. For instance, letters from France inform me that the gales which occurred in England on the 18th, 19th, and 20th occurred also at Paris, Marseilles, and on the coast of Italy, precisely at the same time as in England, and with equal force. Another great fact, the stormy, cold weather we experienced in May, June, July, and part of August, extended to the Cape of Good Hope. Again, by the last mail from that colony, we learn that fine weather set in there about Aug. 18, the same time as the fine weather in England. While advices from Australia state the past winter has been one of the most wet and stormy ever known in that distant colony. Your readers will recollect that the wet and cold weather for the late summer in England was foretold by me in my "Climate of England" (Longman and Co., London) in January, and also in the Journal in March last. But the most strange part of this is, that these atmospheric disturbances occurred at these distant places nearly on the same dates as in England and on the continent of Europe. I simply record this to show the general character of the weather in various parts of the globe at the same time. Of all the branches of science I am acquainted with, the astronomical character of the weather is truly the most interesting and sublime, but it requires more time and expense than I can possibly devote to it. In order to give the atmospheric and other weather phenomena, even in the manner I do at present, requires from 30 to 35 hours' labour each week, so there is no fear of *ennui*, as the French term it, on my part; therefore, I would ask some of your readers not to expect too much from me. The strong wind predicted for the 29th appears to have been more of a local than of a general character; this is readily accounted for, but these winds will extend to London about the 31st, and continue to about the 3rd or 4th November. The next winds will occur about the 6th, 8th, 9th, and 10th rather severe, 12th and 14th severe; and after this the weather will be very tempestuous for some time. Frosty, dull, and changeable weather in the intervals between the atmospheric disturbances.

26, Throgmorton-street, Oct. 30. G. SHEPHERD, C.E., Author of "The Climate of England."

SUBMARINE BLASTING.—Among the works going forward for the improvement of the ports of France the new pier in progress of construction at Havre is one of the most remarkable. Engineers are now employed in removing the foundation of the tower of Francis I., and they take advantage of the high tides to spring the mine, then covered with a great volume of water. They profit by the lower water to remove the rubbish. A new system has been introduced for the explosion of submarine mines. Engineers no longer make cavities in the rock to contain the powder; they merely place a large glass bottle enclosed in a basket at the bottom of the sea where they mean to set, and this bottle is filled with gunpowder in proportion to the effect to be produced. The pressure of a column of water of some feet is sufficient to compress the gas so powerfully as to cause great ravages on the soil on which the basket is placed, even were it of the hardest granite. The gunpowder is ignited by electricity by means of two wires, which communicate the fire to the gunpowder in the bottle. On Thursday one of these sub-

marine mines was sprung by the engineers, in the presence of a multitude of spectators. The charge of gunpowder in the bottle was 30 lbs. When the explosion took place the water rose and formed an artificial water-pot, which fell on the surface of the water producing a considerable undulation. The shock resembled an earthquake, and was even in the town. The spectators assembled on the breakwater felt it tremble as if it had been shaken by a submarine convolution.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WEST WHEAL TREVELYAN.—A sampling of copper ore (between 35 and 40 tons) has taken place, and the mine is reported to be looking very much better than some years ago, were—Wheat Rodney, Chippendale, Tregertha, and others, and Trevelyan may turn out to be long

BRANDON WALLS LEAD MINING COMPANY (LIMITED).

WEARDALE, DURHAM.

Capital, £18,000, in 720 shares of £25 each.
£5 per share to be paid on application, and £10 on allotment.
The remainder, if required, in calls of not more than £2 10s. each, at intervals of not less than three months.

DIRECTORS.
Admiral BURNEY, Ebury House, Twickenham (Chairman of the Oriental and Commercial Company).

H. W. KEALLMARK, Esq., 46, Princes-square, W.

TREVOR C. PLOWDEN, Esq., 74, Gloucester-terrace, W.

Lieut.-Col. A. ROMAINE WRAGGE, Old Charlton, Kent.

SOLICITORS.—Messrs. Sandys and Knott, 5, Gray's Inn-square, W.C.

BANKERS.—Messrs. Herries, Farquhar, and Co., 16, St. James's-street.

CONSULTING ENGINEER.—S. Beardmore, Esq., C.E.

OFFICES.—9, MANCHESTER BUILDINGS, CANNON ROW, S.W.

This company is formed for purchasing and working a valuable lead mine, from which considerable quantities of ore are being raised, situated in Weardale, and surrounded by the well-known mines of Mr. Beaumont.

Mr. J. H. Hitchins, of the Devon Great Consols Mine, in a report to the board, states:—"It is a fortnight since I devoted the necessary time for the examination of the Brandon Walls Mine, and I have now carefully reflected on what then came under my observation, and I beg to assure you that I have much satisfaction in reporting therein in a decidedly favourable manner. I was glad to find that you possess a sufficiently extensive set, being fully 400 fms. on the course of the lead, as will be seen by the accompanying plan; that you have 13 years to run to the end of the grant, and that you are subject to the payment of 1-12th dues on lead ore, and 6d. per ton on ironstone only, terms which are very desirable when we consider the unusually great facilities this property commands for the most prompt, effectual, and cheap development of its several leades, and the profitable realisation of their capabilities and resources. The best lead-bearing measures in this mine (Brandon Walls) are precisely similar to those in which the great results of the wonderfully rich mines (Mr. Beaumont's) have been realised." Mr. Hitchins concludes by saying:—"It cannot but be clearly inferred from the foregoing statements that I not only believe it cannot fail to result in a permanently profitable investment, without involving any other than a comparatively small expenditure of time or money, the true consideration which should influence you in carrying out an undertaking of this nature.

The full prospectuses and reports, with plan, can be obtained of the solicitors, Messrs. SANDYS AND KNOTT, 5, Gray's Inn-square, or at the offices of the company, where samples of the ore can be seen.

BRANDON WALLS LEAD MINING COMPANY (LIMITED).

WEARDALE, DURHAM.

Notice is hereby given, that APPLICATIONS FOR SHARES MUST BE SENT TO THE SOLICITORS, BANKERS, OR ENGINEER TO THE COMPANY, ON OR BEFORE SATURDAY, THE 15TH NOVEMBER, WHEN THE LIST WILL BE CLOSED.

NORTH WHEAL LUDCOTT SILVER, LEAD, AND COPPER MINING COMPANY.

ST. IVE, CORNWALL.

Divided into 4800 parts of shares.

MANAGER.—Capt. R. Knapp, of Wheal Ludcott Mine.

PURSER.—Mr. John Taylor, Liskeard, of Wheal Ludcott.

BANKERS.—Metropolitan and Provincial, Cornhill, London.

This valuable property is situated to the north of Wheal Ludcott, and adjacent to the productive and profitable mines of this rich silver-lead bearing district, including Wheal Trelawny, Mary Ann, and surrounded by the celebrated Caradon Mines.

The extent of the North Wheal Ludcott is nearly one mile in length, and contains three silver-lead lodes and two copper lodes; the stratum is highly mineralised, and such as to justify the expectation of large deposits of mineral. Analogies are strongly in favour of its being equally as productive as its neighbour.

Prior to the operations in Wheal Ludcott, in 1851, a company was formed to work this property, and expended about £6000 in its development. An engine-shaft was sunk 50 fms., levels driven, and all necessary buildings erected, which are available to this company, several of the shareholders at the time refusing to contribute further for the working of the mine, although a discovery had taken place which led the managers to secure the present Wheal Ludcott, to which mine the engine and materials were removed, and the former works discontinued.

The discovery in Wheal Ludcott has induced several of the proprietors in the old mine to resume operations, under a new lease for 21 years, at 1-15th dues; and, with a view to prosecute the works in an efficient manner, have subscribed £600 for its immediate development.

The mine will be managed by the same agents as Wheal Ludcott, under whose care successful results are anticipated. A limited number of shares are for disposal, at £1 each, shareholders in Wheal Ludcott having the preference, if accepted on or before the 1st November, should the number applied for exceed those for disposal. A fair proportion will be issued, and the balance or excess of money returned forthwith.

Application for prospectuses and forms of application for shares to be made to Mr. JAMES CROFTS, 1, Finch-lane, Cornhill, London; and Mr. JOHN TAYLOR, Liskeard, Cornwall. The accompanying form to be delivered to the bankers, who will give a receipt for the same.

NORTH WHEAL LUDCOTT SILVER, LEAD, AND COPPER MINING COMPANY.

On the "Copper-boat" System."

This application to be left with the bankers of the company.

To the Committee of the North Wheal Ludcott Silver, Lead, and Copper Mining Company. GENTLEMEN.—I request you will allot me shares in the North Wheal Ludcott Silver, Lead, and Copper Mining Company; and I herewith enclose you £, being the amount of £1 per share, and bind myself to accept the said shares, or any less number that may be allotted to me, and to pay the calls made upon such shares, in accordance with the rules and regulations of the company.

Signature

Profession or business

Address

Date

ST. DAVID'S GOLD MINING COMPANY (LIMITED).

Incorporated under the Joint-Stock Companies Acts, 1856-57.

Capital, £100,000, in 40,000 shares of £25 each.

Deposit on application, 10s. per share; and 10s. per share on allotment.

BANKERS.—Metropolitan and Provincial Bank, 75, Cornhill.

BROKERS.—Messrs. Webb and Geach, 8, Finch-lane.

SOLICITORS.—Messrs. Crosley and Burn, Lombard-street.

SECRETARY.—Mr. William Seaby.

OFFICES.—2, CROWN COURT, THREADNEEDLE STREET.

The gentlemen depoted on behalf of the shareholders to visit the St. David's Gold Mine have returned, fully satisfied with their inspection. They have much pleasure in bearing testimony to the truthfulness of the reports and statements set forth in the prospectus. The lodes were carefully identified, and the deposition were much struck with their rich and promising appearance. In two of the specimens out of a small number which the deposition took from the mine gold is visible, though the stones have not been crushed. Other stones of ore brought away by them, in which gold is not observable on the surface, have been separately assayed by Prof. Low and Mr. Longmaid, with the following most favourable results:—

Mr. Longmaid's assay, fine gold 33 ozs. 4 dwts. 2 grs. per ton.

Professor Low's 22 " 3 " 6 "

Applications for the remaining shares to be made to the company's bankers, brokers, or secretary, at the offices, in the usual form, accompanied by the deposit of 10s. per share.

By order of the Board, WILLIAM SEABY, Sec.

ST. DAVID'S GOLD MINING COMPANY (LIMITED).

NOTICE.—NO FURTHER APPLICATIONS FOR SHARES WILL BE RECEIVED AFTER SATURDAY, THE 8TH OF NOVEMBER.

By order of the Board, W. SEABY, Sec.

VALUABLE INFORMATION TO INVESTORS, COMPANIES, &c.—THE SOUTH WALES MINE AGENCY.

—South Wales is a colossus of wealth as regards its minerals, but mismanagement, and a want of knowledge respecting the peculiarities of the district, have often proved fatal to many well-merited enterprises. It is a well-known fact that enormous fortunes have been realised by private parties, as well as public companies, in Glamorganshire and Monmouthshire especially. There are inexhaustible coal fields, ironstone, fire-clay, &c., in those two counties not yet touched, while certain localities in Carmarthen, Cardigan, Brecon, Merioneth, Carnarvon, Anglesey, and Montgomeryshire, abound in tin, copper, silver, lead, and even gold mines.

Mr. HENRY EVANS, 105, Commercial-street, Newport, Monmouthshire, from his extensive and various connections, is in a position to supply parties with reliable information respecting everything connected with the mines of the district. SURVEYS made, and all the business of a mining agency office transacted. SHARES BOUGHT AND SOLD. Confidential and other communications will receive prompt attention. On application to Mr. EVANS, the names of many gentlemen of the highest standing in the scientific and mining world will be given, who may be consulted as regards the position, respectability, and responsibility of the advertiser.

SHARES FOR SALE:—30 Lady Eliza (Limited, £5), £2 10s. paid; 40 South Minera (Limited, £5 1/2), £2 12s. paid, an offer wanted.

MR. JOSIAH HUGO HITCHINS, the Consulting Mining Engineer of the Devon Great Consols Mines and others, announces that his present arrangements will enable him to afford GREATER FACILITY AND ADVANTAGE OF CONSULTATION on the ELIGIBILITY and VALUE of MINING INVESTMENTS, and he will also act as a STRICTLY CONFIDENTIAL AGENT in EFFECTING the PURCHASE or SALE of MINING PROPERTIES, and SHARES in MINES, on the most advantageous terms.

Mr. J. H. Hitchins will periodically visit the mines of Devon and Cornwall, the North of England, Ireland, and Wales, to obtain the best local agents' opinions of their present and prospective value, and more especially to enable him on his own judgment to advise thereon in the most reliable manner.

Mr. J. H. Hitchins properly values his reputation as the projector, and for many years the chief superintendent, of not only those wonderful mines, the Devon Great Consols, but also many others in Devon and Cornwall, as is well known, and presumes that his thirty years' varied experience and well-matured judgment will enable him to advise the best investments in Dividend Mines, as well as those likely to realise the greatest and earliest success.

Mining investments afford opportunities occasionally for realising great profit, and, indeed, it is not unfrequently happens that mines in a short time so much improve as to make the shares in them from 100 to 200 per cent., and upwards, more valuable. There are several mines paying dividends, and others safely progressing towards that desirable position, offering great inducement for investment at the present prices of shares (some being very likely to greatly increase in value before long), to which Mr. J. H. Hitchins desires to direct special attention.

Mr. J. H. Hitchins will also assist in the formation of new companies for good undertakings, and advise existing companies on the best improvements to be made in the machinery, means, appliances, and management generally of their mines.

Combe Martin, Ilfracombe, Devonshire.

THE MINING JOURNAL.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN RE CARN VIVIAN MINE.

TO BE SOLD, pursuant to two several Orders made in a Cause of Polglaize v. Broadlick and Others, dated respectively the 9th day of July and the 20th day of August last, BY PUBLIC AUCTION, at the Registrar's Office, Truro, on Wednesday, the 12th day of November next, at twelve o'clock at noon precisely.

2 (3000ths) SHARES of the defendant William Mitchell.
3 (3000ths) SHARES of the defendant William Lobb.
85 (3000ths) SHARES of the defendant William Temby, jun.
20 (3000ths) SHARES of the defendant John Prince.
10 (3000ths) SHARES of the defendant John Pearce.
25 (3000ths) SHARES of the defendant William Semmons.
15 (3000ths) SHARES of the defendant Bennet James.
25 (3000ths) SHARES of the defendant Peter Eddy.
15 (3000ths) SHARES of the defendant Christopher Temby.
85 (3000ths) SHARES of the defendant Richard Greenwood.
43 (3000ths) SHARES of the defendant Edmund Gilbert Hamley.
219 (3000ths) SHARES of the defendant William Morhead.
10 (3000ths) SHARES of the defendant William Morhead, jun.
5 (3000ths) SHARES of the defendant John Penney Endean.
150 (3000ths) SHARES of the defendant Thomas Blake Daniel.
6 (3000ths) SHARES standing in the cost-book of the said mine
in the name of the defendant Richard Nattie Clemens.
37 (3000ths) SHARES of the defendant Joseph Challice.

Of and in the said MINE.

JOHN GILBERT CHILCOTT, Solicitor, Truro

(Agent for John Lirskey Coad, Plaintiff's Solicitor, Truro).

Dated Registrar's Office, Truro, October 29, 1862.

LANDED ESTATES COURT, IRELAND.

COUNTY OF WICKLOW.

In the Matter of the Estate of HENRY LAURENCE THOMAS TSCHUDY VON USTER, Owner; JOHN CONOLLY and WILLIAM ROBINSON FAYLE, Petitioners.

TO BE SOLD, before the Honourable Judge Hargrave, in his Court, Four Courts, Dublin, on Friday, the 7th day of November, 1862, at noon, in One Lot, the COPPER, COPPER ORE, and ALL OTHER ORES, MINERALS, MINERAL SUBSTANCES, CLAYS, EARTHS, STONES, SLATES, ROCKS, and ALL OTHER SUBSTANCES in the nature of MINES or MINERALS of commercial value, whether open or unopened, which may be found to be in, under, upon, within or through all those THE TOWNSLEADS of KNOCKANODE and RAHENAVINE, situated in the parish of CASTLEMACKADAM, barony of ARKLOW, and county of WICKLOW, held under lease, dated 1st day of May, 1860, for the term of 31 years from the 1st day of April, 1860, subject to the yearly rent of 1-18th in kind, or the value in cash, at the option of the mine lord, and to the usual mining covenants.

Dated this 18th day of July, 1862. —HENRY FAWCETT, Chief Clerk.

OBSERVATIONS.

These mines are held under lease or licence for the term of 31 years, from the 1st April, 1860, at 1-18th dues, in kind delivered at grass, or in cash, less all expenses incurred for dressing, making merchantable, and disposing of the ores. Compensation for surface damage to be made at agricultural value only, and one-half of such compensation to merge in, or to be subject to, a set-off for royalty dues paid to the landlord.

The lands, &c., on the two townlands, comprising together 382a. 3r. 32p. statute measure, are subject to the lessee's right to enter and search for minerals. The lessee has also the exclusive right to all water-power, except that now legally used by Michael Wilkins, Esq.

The Dublin, Wicklow, and Wexford Railway, now in course of construction, passes within a quarter of a mile of these mines, and the Dublin and Wexford mail-coach road passes through them.

The townland of Knockanode, where the principal mining operations have hitherto been carried on, adjoins on its south boundary the mines of the Wicklow Copper Mine Company, on the east the Tigroney and Cranebone Mines, and is separated only by the latter from the mining seat of the Connorne Mining Company.

There are two distinct mines—the South and the North Mine—opened on Knockanode, which can be worked by water-power alone.

These mines have been favourably reported on by Captain CHARLES THOMAS, sen., of Dolcoath Mine, Camborne, Cornwall; JEHU HITCHINS, Esq., and FRANCIS LISBANE, C.E., copies of which reports may be seen at the office of the solicitors for the petitioners and owner, and of the said owner and the petitioner, W. H. FAYLE, as hereafter referred to.

For rentals and further particulars, apply at the Landed Estates Court, Dublin; and to D. and T. FITZGERALD, Solicitors for Petitioners, having carriage of the sale, 20, St. Andrew-street.

W. H. FAYLE, one of the petitioners, 55, Townsend-street.

FREDERICK L. FLOOD, Solicitor for the Owner, 2, Dame-street, Dublin; and to

HENRY VON USTER, Esq., the owner, "The Meetings," Ovoca, county of Wicklow.

VALENCIA SLATE SLAB QUARRIES, COUNTY KERRY, IRELAND.

MESSRS. FULLER AND HORSEY are instructed to SELL, BY PRIVATE CONTRACT, THE EXTENSIVE QUARRIES AND MILLS of the VALENCIA SLATE SLAB COMPANY, situated in the island of VALENCIA, county KERRY, IRELAND.

The works have been carried on by the present company for about 14 years, and a very large outlay has been made in opening the quarries, and in erecting the mills and the requisite machinery.

The quarries are situated on the side of a mountain, about 420 ft. above the sea level, and an opening has been made for working about 120 ft. wide, running into the mountain to about the same depth, unearthing a succession of platforms of slate of various widths.

The slate rock lies most conveniently for working, at an angle of about 35°, and has a regular cleavage. The slabs are severed by wedges instead of by blasting, thus avoiding the large amount of waste occasioned by the latter process. The roof of the quarry is self-sustained, and is perfectly secure. The quality of the slabs is now well known and appreciated, and are taken in large quantities by the principal merchants in London and elsewhere. They take a beautiful and permanent polish, are particularly valuable for enamelling, are unaffected injuriously by furnace heat, and are raised in larger sizes than from any other quarry. The waste from the slab blocks is made into roofing slates, for which there is ample local demand. The present yield is about 2000 tons of slate slabs annually, but by a comparatively small outlay in an extension of the workings this quantity may be doubled, the machinery at the mills being equal to prepare that quantity, and the demand at the present time being in excess of the capabilities of supply.

The mills are situated about 2½ miles from the quarries, are connected by a good road of easy descent, which is kept in repair principally at the expense of the county; but every facility would be afforded by the Knight of Kerry, who is the freeholder, for laying down a tramway by the side of the present road, which would much lessen the cost of transit.

The mills are most advantageously placed, being immediately contiguous to the pier, at which vessels of 300 tons burthen can load alongside, and there are no pier dues nor wharfage payable. The harbour of Valencia is both safe and commodious, and freights to London are about the same as from the North Wales ports.

The buildings are well arranged, and substantially erected. They comprise SAWING and PLANING MILLS, ENGINE and BOILER HOUSES, smithy, carpenter's shop and stores, stabling for eight horses, watchman's dwelling and mess-house, weigh-house, offices,

THE MINING JOURNAL.

CLAYTON, SHUTTLEWORTH, AND CO.,
AGRICULTURAL AND GENERAL ENGINEERS,
LINCOLN, and 78, LOMBARD STREET, LONDON.

MANUFACTURERS OF
PORTABLE AND FIXED STEAM
ENGINES,

Which are adapted for every purpose to which steam-power can be applied. When intended for winding they are fitted with reversing link motion and requisite gearing. The portable engines are easy of removal from place to place, and may be set to work immediately on arrival.

COMBINED THRASHING
MACHINES,

Which dress the corn ready for market at one operation.

GRINDING AND MORTAR MILLS,
SAWING MACHINERY,
PUMPS for IRRIGATION AND
MINING PURPOSES.

Full particulars and estimates supplied on application to CLAYTON, SHUTTLEWORTH, and Co., as above.

International Exhibition, Class 8 and 9—Prize Medals.

CLAYTON, SHUTTLEWORTH, AND CO
have been AWARDED PRIZE MEDALS for the "good arrangement, good workmanship, and practical success" of their steam-engine in Class 8, and "for their steam-engines and threshing machines" in Class 9.

CLAYTON, SHUTTLEWORTH, and Co., Agricultural and General Engineers, Lincoln, and 78, Lombard-street, London.

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS
(the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.

Warehouse, 81, Upper Ground-street, London, S.

International Exhibition, 1862—Prize Medal.

BASTIER'S PATENT CHAIN PUMP
MAY BE SEEN IN OPERATION DAILY (behind Armstrong's Crane in the Eastern Passage) in the WESTERN ANNEXE of the INTERNATIONAL EXHIBITION building. It raises nearly 500 gallons of water per minute, although the pump tube is but 4½ in. in diameter, and the motive power is only a 2 horse engine.

The International Jurors have AWARDED A PRIZE MEDAL "For originality of good arrangement" of the pump.

Applied to the Patentees, apply as above, or to Mr. J. U. BASTIER, No. 47, Warren-street, London.

International Exhibition, 1862—Prize Medal.

THE PATENT ADAMAS
MANUFACTURES are CHARACTERISED by their EXTREME HARDNESS, DURABILITY, and CHEAPNESS. The new material has been extensively and successfully employed for gas burner nibs, machine bearings, wine and beer casks, and for a variety of other useful purposes.

Applied as machine and spindle bearings, the Patent Adams is TWICE MORE DURABLE than the HARDEST METAL, NEVER HEATS, REQUIRES VERY LITTLE LUBRICATION, friction being reduced to the minimum. As gas burner nibs, it ensures a uniformly large and good shaped flame, as it does not corrode. And as cocks and taps, it may be used for every purpose, being IMMEDIATELY SOFTENED by ACIDS or OTHER CHEMICAL LIQUIDS, and not turning wine sour; in fact, it neither corrodes nor oxidises under any circumstances.

Mr. J. U. BASTIER, No. 47, Warren-street, London.

International Exhibition, 1862—Prize Medal.

IRE-PROOF SAFES.—
GEORGE PRICE'S TREBLE PATENT (PRIZE MEDAL, 1862) FIRE AND BURGLAR-PROOF BOOK AND PLATE SAFES, DEED CHESTS, STRONG ROOM DOORS, and PATENT CABINET, RIM, and MORTICE LOCKS.

Illustrated Price Lists post free.

CLEVELAND SAFE AND LOCK WORKS,
WOLVERHAMPTON.

Prize Medals—International Exhibition, Class 1 and 2.

PATENT PLUMBAGO CRUCIBLES.—
The CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY are the ONLY KIND for which a MEDAL has been AWARDED, and are now used exclusively by the English, Australian, and Indian Mints; the French, Russian, and other Continental Mints; the Royal Armories of Woolwich, Brest, and Tolon, &c., and have been adopted by most of the large ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The GREAT SUPERIORITY of these melting pots consists in their capability of melting on an average 40 pounds of the most difficult metals, and a still greater number of those of an ordinary character, some of them having actually reached the EXTRAORDINARY NUMBER of 96 meltings. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other crucibles. In consequence of their great durability, the saving of waste is also very considerable.

Mr. BATTISON has recently introduced CRUCIBLES SPECIALLY ADAPTED for melting purposes, viz.—MALLEABLE IRON MELTING, the average working time being reduced to about seven days; STEEL MELTING, which are found to be about 1/4 ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting longer than the ordinary iron pots, and saving the great loss which arises from loss of fuel.

Mr. BATTISON, &c., apply to the Patent Plumbago Crucible Company, Battersea

Works, London, S.W.

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THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
1000 Alderley Edge (Cheshire) [L.]	10 0 0.	60	..	7 18 6.	0 10 0—May, 1862	
4000 Bedf ord United (copper), Tavistock	2 6 8.	4%	..	12 17 6.	0 2 0—Sept, 1862	
240 Boscan (tin), St. Just	20 10 0.	60	..	36 10 0.	1 0 0—Mar, 1862	
2000 Botalack (tin, copper), St. Just	91 5 0.	250	..	449 15 0.	4 0 0—Aug, 1862	
1000 Barn Bras (copper, tin), Illogan	15 0 0.	65	..	273 10 0.	2 0 0—Feb, 1862	
200 Cefn Cwrt Brynwo (lead), Cardigansh	33 0 0.	10	..	9 0 0.	4 0 0—April, 1861	
250 Copper Hill (copper) Redruth	48 0 0.	67%	..	9 10 0.	2 10 0—Sept, 1862	
12000 Copper Miners of England	25 0 0.	25	..	7% per cent.	— Half-yrly.	
35000 Ditto ditto (stock)	100 0 0.	24	..	1	per cent.	— Half-yrly.
1055 Croddack Moor (copper), St. Cleer	8 0 0.	26%	..	7 12 0.	0 4 0—July, 1862	
512 Cregibraws and Penkevill, St. Columb	..	..	..	0 10 0.	0 10 0—Jan, 1862	
867 Cwm Eryn (lead) Cardigansh [L.]	7 10 0.	11	..	7 12 0.	0 5 0—July, 1862	
128 Cwmystryd (lead), Cardigansh [L.]	60 0 0.	105	..	230 10 0.	4 0 0—Mar, 1862	
230 Derwent Mines (sl., lead), Durham	300 0 0.	180	..	147 0 0.	8 0 0—June, 1862	
1024 Devon Gt. Con. (cop.), Tavist. [S.E.]	1 0 0.	500	490 500	816 0 0.	3 0 0—Sept, 1862	
358 Dolcoath (copper, tin), Camborne	128 17 6.	570	..	636 10 0.	7 0 0—Oct, 1862	
3000 Dwyryd (lead), Wales	12 6 6.	104	..	0 15 0.	2 6—Sept, 1862	
512 East Bassel (lead), Redruth [S.E.]	29 10 0.	67%	524 55	104 0 0.	2 0 0—Sept, 1862	
614 East Cardon (copper), St. Cleer [S.E.]	2 14 6.	46%	44 45	4 17 6.	1 0 0—Oct, 1862	
300 East Darren (lead), Cardigansh	32 0 0.	45	..	83 10 0.	1 0 0—June, 1862	
128 East Pool (tin, copper), Pool, Illogan	24 5 0.	420	..	315 0 0.	2 10 0—Oct, 1862	
2800 Foxdale (lead) Isle of Man [L.]	25 0 0.	35	..	..	— July, 1862	
6000 Frank Mills (lead), Devon	3 18 6.	4	..	0 16 0.	0 2 0—Mar, 1862	
6000 Great South Tongus [S.E.], Redruth	0 14 6.	53%	536 57%	7 18 6.	0 5 0—Dec, 1861	
179 Great Wheal Fortune (tin), Breage	18 6 0.	28	26 27 x4	3 0 0.	0 10 0—Oct, 1862	
598 Great Wh. Vor (tin, cop.), Helston [S.E.]	40 0 0.	6	..	2 2 6.	0 5 0—Sept, 1862	
1024 Gunnis Lake (Clitter's) Adit	0 2 0.	314	..	0 3 0.	0 1 6—Mar, 1862	
1624 Herdofad (id.), near Liskeard [S.E.]	8 10 0.	42	..	21 10 0.	1 15 0—Oct, 1862	
1000 Hibernal Mine Company	92 6 2.	274	..	7 10 0.	0 15 0—Sept, 1862	
400 Isbarn (lead), Cardigansh, Wales [S.E.]	15 15 0.	110	..	387 10 0.	2 0 0—June, 1862	
9000 Marks Wheal (copper), Cardon	4 10 6.	10%	10% 10%	2 4 0.	0 4 0—Oct, 1862	
1800 Minera Mining Co. [L.], Wrexham 25 0 0.	200	..	..	92 18 6.	6 5 0—Aug, 1862	
20000 Mining Co. of Ireland (cop., lead, coal)	7 0 0.	194	19%	14 7 11.	0 7 0—Dec, 1861	
640 Mount Pleasant (lead), Mold	4 0 0.	27	..	18 1 8.	0 7 6—Aug, 1862	
6000 New Birch Tor and Vifiter Cons. (tin)	1 6 6.	1	1 1/2 13%	0 3 6.	0 1 6—Mar, 1862	
1366 North Gramble (copper), Redruth	2 7 6.	6	..	0 10 0.	0 10 0—Mar, 1861	
593 North Treskerby (copper), St. Agnes	1 9 0.	3%	3% 4	0 1 6.	0 1 6—Sept, 1862	
8000 Orsadd (lead), Flintshire	0 8 0.	14%	..	0 10 4.	0 8 0—Mar, 1862	
440 Par Consol (cop.), St. Blazey [S.E.]	1 2 6.	6	..	36 12 6.	3 0 3—Dec, 1861	
20000 Parrys Mines (copper), Anglesey [L.]	50 0 0.	..	..	47 10 0.	10 0—Oct, 1862	
1772 Polherio (tin), St. Agnes	..	5.	..	6 16 6.	10 0—Dec, 1861	
112 Providence (tin), Uny Lelant [S.E.]	10 6 7.	47	44 45	65 0 0.	1 0 0—Aug, 1862	
6000 Rosewall Hill and Ransom United	2 16 0.	33%	33% 41%	0 8 6.	0 2 6—Oct, 1862	
402 Rosewarne Consols (copper)	3 7 6.	3%	..	0 2 0.	0 2 0—Oct, 1862	
16 Rhosneigr (lead)	50 0 0.	..	..	1250 0 0.	109 0 0—Quarterly	
512 South Cardon (cop.), St. Cleer [S.E.]	1 5 0.	420	..	336 0 0.	5 0 0—Sept, 1862	
612 South Tolgs (cop.), Redruth, Cornwall	8 0 0.	35	32 34	107 0 0.	1 0 0—May, 1862	
8. W. Francis (cop.), Illogan [S.E.]	18 19 0.	105.	1024 107%	362 5 0.	2 0 0—Sept, 1862	
280 Spear Moor (tin, copper), St. Just	31 17 9.	—	..	9 15 0.	1 0 0—June, 1862	
940 St. Ives Consols (tin), St. Ives	8 0 0.	25	26 28	435 10 0.	0 10 0—Aug, 1862	
9500 Tamar Con. (sl., id.), Bealston [S.E.]	4 10 0.	136	..	5 6 0.	0 2 6—Jan, 1862	
6000 Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0.	14	12 1/2 13%	11 12 6.	0 5 0—July, 1862	
1000 Trumpet Consols (tin), near Helston	11 10 0.	—	..	11 0 0.	2 0 0—Mar, 1862	
4200 Vigras and Clogau (cop.) [L.]	15 0 0.	30	29 31	4 12 6.	1 0 0—Oct, 1862	
1024 Wendron Consols (tin), Wendron	11 13 10.	12.	11 12	8 15 0.	1 0 0—Jan, 1861	
6000 West Basset (copper), Illogan [S.E.]	1 10 0.	134%	..	23 6 0.	0 6—Sept, 1862	
60 West Barron Gill (lead), Yorkshire	50 0 0.	..	..	14 10 0.	3 0 0—June, 1861	
1024 West Cardon (cop.), Liskeard [S.E.]	8 0 0.	36	32 34	101 1 3.	0 10 0—Oct, 1862	
6400 West Fowey Consols (tin and copper)	7 10 0.	314	..	0 19 0.	0 3 0—May, 1862	
1024 West Penstruth	4 0 0.	9.	..	2 19 6.	2 19 6—Mar, 1862	
4000 W. Wh. Seton (cop.), Camborne	8 10 0.	14	12 1/2 13%	11 12 6.	0 5 0—July, 1862	
512 Wheal Ludicot (lead), St. Ives	10 8.	113%	11 11 1/2	2 2 0.	0 10 0—Oct, 1862	
896 Wh. Margaret (tin), Uny Lel. [S.E.]	9 17 6.	46.	44 45	74 5 0.	1 0 0—Aug, 1862	
1000 Wheal Mary (tin), Lelant	86 2 6.	440	..	284 8 0.	4 0 0—Mar, 1862	
1024 Wheal Mary Ann (id.), Menheniot [S.E.]	8 0 0.	16	15 16	66 7 6.	0 10 0—Sept, 1862	
80 Wheal Owles (tin), St. Just, Cornwall	70 0 0.	300	..	303 3 0.	8 0 0—Aug, 1862	
396 Wheal Seton (tin, copper), Camborne	58 10 0.	165.	163 166	141 15 0.	2 0 0—Oct, 1862	
1040 Wh. Trelawny (sl., id.), Liskeard [S.E.]	8 17 0.	171%	16% 17	45 12 6.	0 10 0—Aug, 1862	
5000 Wicklow (copper) [L.]	5 0 0.	39	..	43 17 6.	2 0 0—Oct, 1861	

* Dividends paid every two months. † Dividends paid every three months.

MINES WITH DIVIDENDS IN ABEYANCE.

700 Aberdovey (silver-lead), Merioneth	1 10 0.	30	..	0 10 0.	0 10 0—Mar, 1862
4942 Alfred Consols (cop.), Philack [S.E.]	5 15 11.	..	..	20 3 0.	2 8—April, 1862
256 Conduffor (cop., tin), Camborne	32 0 0.	66	65 67	85 0 0.	2 0 0—June, 1862
4000 Cook's Kitchen (copper), Illogan	17 0 9.	33.	30 31	1 7 0.	0 7 0—May, 1862
472 Devon and Cornwall (copper)	5 16 3.	9.	..	0 10 0.	0 2 6—Feb, 1862
672 Dini Dung (tin), Gulven	40 15 6.	44	..	16 7 6.	1 10 0—Mar, 1862
12800 Drake Walls (tin, copper), Calstock	2 1 0.	1.	..	0 15 0.	0 1 6—June, 1862
2048 East Wheal Lovell (tin), Wendron	2 13 6.	..	..	0 5 0.	0 5 0—July, 1862
4940 Fowey Consols (copper), Tywardreath	4 0 0.	5.	..	41 9 3.	0 2 6—June, 1862
119 Great Work (tin), Germoe	100 0.	110	..	221 10 0.	7 10 0—Feb, 1862
5000 Kelly Bray (lead), Callington	4 15 6.	34	..	0 6 0.	0 2 0—Feb, 1862
20 Laxey Mining Company, Isle of Man	100 0.	1200	..	1420 0.	0 50 0—June, 1862
160 Levant (copper, tin), St. Just	2 10 0.	95	..	1091 0.	5 0 0—May, 1862
470 Newtownards Mining Co., Co. Down	50 0 0.	35	..	58 0.	1 0 0—Sept, 1862
6000 North Down (copper) Redruth	2 3 4.	3%	3 3%	0 10 0.	0 2 6—May, 1862
20000 Sortridge Con. (cop.), Whitchurch [S.E.]	16 0 0.	4.	..	0 10 0.	0 2 6—July, 1862
12					